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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

G. HAROLD NOYES, Meteorologist.
TRENTON, N. J.

Vol. XXXIII. January, 1928. No. 1

GENERAL SUMMARY.

The new year opened with generally clear skies and for five days temperatures averaged well down in the lower twenties; this was followed by warmth mostly above normal very persistently until the closing five day period, when temperatures averaged again close to the twenty degree mark. The entire month averaged the warmest since the Januaries of 1921 and 1919, but was closely approached by that of 1924. There was a general absence of snow, except for the storm of the 28th, when practically all of the snow of the month occurred. This snowstorm was remarkable for its great bulk and lack of water content. The depth of the snow was greatest in adjacent portions of southern Burlington and Ocean counties, and far exceeded the measurements in northernmost counties. Practically no interruption of transportation and wire traffic resulted. Two cold waves occurred, the first on the night of the first, and the second on the the night of the twentieth-twenty-first; they were not severe, and practically no damage resulted. The Delaware river closed with gorged ice several times, with open intervals, but caused little result. There was an excess of clear days, with fresh northwesterly winds, above normal, and more sunshine than normal.

A little plowing was done by some farmers in central and southern districts during the third week, and grass and grain looked well up to the time of the snowstorm on the 28th.

Storm warnings were displayed along the coast on the 1st, 19th, 20th, 24th, 25th and 28th.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 32.5°, which was 2.6° above normal. The highest temperature was 65° at Belleplain, Pleasantville and Vineland, on the 15th, and the lowest, 15° below zero, at Layton on the 30th. The greatest daily range of temperature was 44° at Newton on the 1st. The highest monthly mean temperature was 35.6° at Atlantic City, and the lowest, 28.9° at Layton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +3.9°; Red Sandstone Plain, +2.6°; Southern Interior, +2.1°; Sea Coast, +1.9°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 2.26 inches, which was 1.35 inches below normal. The average total snowfall at twenty-two selected stations was 8.3 inches, which was 0.5 inch above normal.

The greatest monthly precipitation was 3.97 inches, at Chatham, and the least, 1.37 inches at Sandy Hook. The greatest amount of precipitation in any 24 consecutive hours was 2.32 at Indian Mills on the 28-29th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1928, to date, by sections, is: The Highlands, —0.98 inch; Red Sandstone Plain, —1.31 inches; Southern Interior, —1.44 inches; Sea Coast, —1.83 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 16 miles per hour, which was 3 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 68 miles per hour from the south at Atlantic City on the 24th. High winds also occurred on the 1st, 19th, 20th, 21st, 24th, 25th, 26th, 28th and 29th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 15, which was 4 more than normal; partly cloudy, 8. or 1 less than normal; cloudy, 8, or 3 less than normal. The per cent of possible sunshine was 60, which was 10 per cent above normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 30.03 inches, which was 0.08 inch below normal. The highest reading was 30.61 inches on the 16th and the lowest, 28.91 inches on the 25th, both at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 3.4 feet, and the highest reading was 5.0 feet on the 2d. At Trenton the mean stage was 2.5 feet, which was 1.0 foot below normal; the highest reading was 3.6 feet on the 2d.

Dense fog occurred on the 9th, 10th and 31st. Thunderstorms were noted on the 13th, 14th and 25th. Sleet fell on the 8th, 16th, 17th and 28th. A solar halo was observed on the 14th, and lunar halos on the 2d, 5th, 6th and 31st.

OBITUARY.

WILLIAM H. MITCHELL, D. D. S., observer at Bergen Point, died suddenly on the 25th, his last observation having been taken at midnight of the 24th. His cooperation with this Bureau has been uninterrupted since January 1, 1904. Such a record is worthy of praise and emulation.

COMPARATIVE DATA FOR JANUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	30.8	67	0	4.08	5.41	3.33	......	......	......	......	......
1886	27.3	60	−10	4.47	5.59	3.08	......	......	......	......	......
1887	28.4	67	−6	3.86	6.65	2.00	......	......	......	12	10
1888	25.4	59	−12	4.77	6.74	2.80	.....	......	......	12	9
1889	36.2	60	8	5.68	8.78	3.84	......	......	......	9	9
1890	**41.3**	**78**	**12**	2.29	3.22	1.05	......	......	......	11	10
1891	34.2	59	10	**6.57**	**10.55**	**4.41**	......	10	11	10	10
1892	29.9	67	−6	5.13	7.05	2.50	......	10	9	12	10
1893	21.6	*54*	−21	3.04	4.56	1.87	......	10	10	11	9
1894	34.2	61	−4	2.34	3.80	1.18	......	10	8	13	11
1895	28.1	64	−4	4.66	5.80	2.48	9.7	10	10	11	11
1896	28.6	61	−7	1.66	*2.81*	*0.68*	......	12	10	9	5
1897	29.0	64	−6	2.80	4.21	1.70	11.5	11	8	12	9
1898	32.6	64	−10	4.20	5.90	2.79	9.7	9	11	11	11
1899	30.1	60	−21	4.01	5.73	2.40	6.0	13	8	10	11
1900	32.4	64	−5	3.85	5.50	2.37	2.6	11	11	9	10
1901	30.4	63	−6	2.52	4.00	1.35	5.4	11	11	9	9
1902	28.4	58	−5	3.28	4.35	2.52	8.6	12	9	10	10
1903	30.4	57	−5	3.90	5.04	2.31	6.4	10	10	11	10
1904	23.3	58	*−34*	3.09	4.67	1.34	15.6	13	7	11	10
1905	27.0	60	−16	4.18	7.13	2.68	21.3	12	9	10	9
1906	36.5	74	−5	2.85	3.86	2.08	3.1	11	9	11	11
1907	31.8	71	−19	3.50	5.80	1.93	10.3	8	9	14	14
1908	31.8	60	−6	3.74	5.22	2.29	9.9	12	11	8	9
1909	33.2	69	−12	3.18	4.13	2.18	7.5	8	9	14	12
1910	29.7	*54*	−15	5.04	6.65	3.66	13.3	8	8	15	15
1911	33.5	63	0	3.44	5.34	1.97	3.6	10	7	14	14
1912	22.3	58	−32	2.82	4.62	1.73	13.4	8	12	11	13
1913	35.9	68	10	3.58	4.71	2.63	*0.8*	11	7	13	14
1914	31.9	73	−12	3.85	6.15	1.95	2.4	9	8	14	9
1915	33.5	61	3	6.55	8.92	4.40	3.4	11	6	14	12
1916	35.1	74	−2	*1.50*	2.96	0.92	1.9	11	8	12	11
1917	31.4	58	0	3.26	4.52	2.35	5.4	10	8	13	13
1918	*20.3*	56	−16	4.14	6.14	2.78	18.9	12	8	11	11
1919	34.1	62	−7	3.51	4.44	2.24	1.3	14	7	10	8
1920	23.6	53	−10	2.60	3.53	1.61	6.6	11	7	13	11
1921	33.0	63	−5	2.63	3.49	1.78	2.7	13	8	10	9
1922	27.6	57	−11	2.62	4.13	1.08	11.1	15	6	10	8
1923	30.1	66	−14	5.22	7.26	3.41	16.6	9	7	15	12
1924	32.2	65	−6	4.48	5.69	2.88	1.4	15	8	8	8
1925	27.4	59	−20	4.43	8.73	2.54	**22.8**	12	6	13	10
1926	30.8	63	−9	2.61	4.04	1.63	2.4	11	8	12	9
1927	29.2	70	−12	2.22	3.32	1.19	7.9	11	7	13	11
1928	32.5	65	−15	2.26	3.97	1.37	8.3	15	8	8	8

W. B. O. Philadelphia-2-28-28-910.

Climatological Data for January, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	30.8	+3.5	54	7	−12	30	39	3.05	−0.49	0.97	10.5	10	18	3	10	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	29.8^b	+2.9	57	7	−4	30	39	2.92	−0.63	1.24	5.0	10	5	4	22	......	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	−4	30	....	2.21	−0.97	0.90	5.9	11	17	6	8	w.	Brice E. Riker.
Dover	Morris	600	44	30.2^b	+3.6	55	7	1	30	36	2.67	−1.72	1.17	5.0	7	12	12	7	......	William C. Harris.
Layton	Sussex	480	27	28.9	+4.2	60	7	−15	30	42	3.03	+0.14	1.27	8.0	10	8	5	18	w.	A. M. Depue.
Newton	Sussex	769	44	30.2	+4.5	57	7	−2	30	44	1.74	−1.87	0.75	3.0	11	12	10	9	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	......	......	......	......	−10	30	....	2.16	−1.44	1.25	12.5	8	16	8	7	......	Town Engineer.
Sussex	Sussex	442	33	31.2^a	+4.6	58	7	−11	30	38	2.65	−0.83	0.76	6.2	11	13	9	9	nw	A. J. W. Mowatt
Means and extremes	......	......	....	30.2	+3.9	60	7	−15	30	44	2.55	−0.98	1.27	7.0	10	13	7	11	w.	
The Red Sandstone Plain.																				
Bergen Point‡‡	Hudson	37	31	......	......	56	1†	......	......	...	......	......	......	......	....	....	....	....	......	William H. Mitchell
Boonton	Morris	400	§38	30.6	+3.3	57	7	1	30	36	2.33	−1.50	0.94	......	8	20	1	10	sw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	...	3.97	+0.28	1.26	4.0	9	19	10	2	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	32.3^c	+2.1	58	7	2	30	37	2.55	−1.49	1.02	4.6	12	14	14	3	nw.	Union County Park Com
Flemington	Hunterdon	140	§42	32.2	+2.4	60	7	−3	30	37	2.58	−1.11	0.89	4.0	11	22	3	6	w.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	31.6	+2.8	57	7	−5	30	40	2.92	−1.03	1.32	8.0	7	13	9	9	nw.	Charles J. Bates.
Jersey City	Hudson	10	30	33.9	+1.7	55	7	11	2†	37	1.57	−1.93	0.65	3.6	9	14	10	7	w.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	31.2	+0.7	55	1†	1	30	39	2.84	−0.81	0.83	9.5	11	21	3	7	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	32.2	+4.2	58	7	−1	30	29	2.50	−1.20	1.03	3.9	8	15	10	6	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	75	32.9	+2.7	58	1	4	30	40	1.54	−2.25	0.70	2.2	8	14	11	6	w.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	......	....	2.19	......	1.28	......	5	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	32.8	+3.2	58	7	10	30	29	2.38	−1.47	1.20	4.0	6	24	2	5	nw.	Marion T. Probert.
Plainfield	Union	120	40	32.4	+2.4	58	7	0	30	43	2.30	−1.72	0.93	4.7	8	12	12	7	w.	E. D. Pearson.
Ridgefield	Bergen	80	11	30.6	......	57	7	5	30	29	2.25	......	1.20	3.0	6	12	10	9	nw.	George P. Kirsten.
Somerville	Somerset	70	45	31.7	+2.9	59	7	−3	30	33	2.28	−1.44	1.00	2.7	8	17	5	9	w.	H. B. TenEyck.
South Orange	Essex	200	58	......	......	......	......	4	30	....	§	......	0.65	3.0	....	....	....	....	......	Everett W. Bird.
Verona	Essex	490	2	31.2	......	56	7	8	30†	41	2.38	......	0.95	5.9	9	14	11	6	w.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	......	...	2.48	......	1.42	......	8	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	33.8	+2.9	55	7	11	2	34	1.41	−2.25	0.52	3.0	9	8	15	8	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	32.0	+2.6	60	7	−5	30	43	2.44	−1.31	1.42	4.5	8	16	8	7	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	......	......	65	15	−8	30	39	1.68	−1.85	0.54	10.4	10	....	....	....	......	Thomas J. Durell.
Bridgeton††	Cumberland	90	47	34.4	+0.7	64	15	−6	30	34	1.47	−2.05	0.62	6.0	8	14	8	9	nw.	Paul T. Kornman.
Burlington	Burlington	12	§42	34.2	+1.9	57	1†	−4	30	35	2.52	−0.88	1.30	10.0	8	15	6	10	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	34.4	+2.3	62	15	−7	30	40	2.05	−1.42	0.78	13.2	7	15	9	7	nw.	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	....	
Hightstown	Mercer	120	34	32.3	+2.4	57	7†	−9	30	34	1.97	−1.30	0.77	7.2	6	19	5	7	nw.	Charles Welsh.
Imlaystown	Monmouth	115	37	32.0^c	+0.9	57	13	−7	30	34	1.74	−1.80	0.80	......	9	10	14	7	sw.	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	33.8	+1.9	61	15	−9	30	37	3.78	−0.04	2.32	23.0	8	15	10	6	nw.	James M. Armstrong.
Lakewood	Ocean	54	24	32.8	+1.5	60	13	−5	30	37	2.04	−1.64	1.05	12.0	9	17	5	9	w.	R. W. Holman.
Moorestown	Burlington	75	65	33.8	−3.1	59	8†	−4	30	34	1.94	−1.52	0.75	15.0	8	18	7	6	nw.	John B. Warrick.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	...	1.95	−1.58	0.63	7.8	9	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	33.8	......	65	15	6	4	36	2.52	−0.64	1.05	......	8	22	4	5	sw.	N. J. Dept. Conservation.
Riverton	Burlington	......	2	32.4	......	60	15	1	30	33	2.12	......	0.78	8.0	8	12	8	11	nw.	Japanese Beetle Laboratory
Runyon‡‡	Middlesex	18	4	31.2	......	58	7	−4	30	40	1.90	......	1.04	......	7	15	14	2	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	33.6	+3.1	58	7	7	30	32	1.74	−1.43	0.70	11.0	8	9	13	9	sw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	35.2^b	+2.6	64	15	9	3	32	1.85	−1.78	0.76	20.0	8	19	2	10	nw	John H. Brown.
Vineland	Cumberland	109	59	35.2	+3.0	65	15	0	30	37	1.78	−2.24	0.80	9.0	6	20	5	6	w.	H. C. Himes
Philadelphia, Pa	......	117	57	35.6	+3.0	61	15	12	2	31	1.91	−1.39	0.84	10.4	7	13	9	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	.	33.5	+2.1	65	15	−9	30	40	2.07	−1.44	2.32	11.7	8	16	8	7	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	34.7^b	+2.5	59	13	8	30	35	2.17	−1.40	1.15	6.0	6	21	8	2	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	35.6	+3.1	64	15	10	30	32	2.23	−1.26	0.98	11.1	9	15	11	5	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	35.4	+1.3	63	15	10	30	30	2.10	−1.27	0.82	6.5	8	13	11	7	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	31.6	0.0	60	15	0	30	31	1.42	−2.76	0.53	3.7	8	14	6	11	w.	William D. Martin.
Sandy Hook	Monmouth	22	30	33.4	+2.6	54	13	13	2	30	1.37	−2.48	0.51	2.5	10	10	12	9	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	34.1	+1.9	64	15	0	30	35	1.86	−1.83	1.15	6.0	8	14	10	7	w.	
For the State	......	......	....	32.5	+2.6	65	15	−15	30	44	2.26	−1.35	2.32	8.3	8	15	8	8	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: Bergen Point is Bayonne: Highwood is Englewood: Indian Mills is Atsion: New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for January, 1928

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.10							.01	.16							.10			.87	.50					.97			.32	.52			3.05
Charlotteburg	Passaic	.35							T.	.16					.13		.03	.06		.05	.55	T.				1.24	T.		.13	.22			2.92
Culvers Lake	Delaware	.29							.04	.18	.01				.01		T.	.04		T	.60		T			.90	T		.04	.10			2.21
Dover	Passaic								*	.23							.09			.68					*	1.17			.50				2.67
Layton	Delaware								.03	.08					.12		*			.41	.38					1.27			.46	.28			3.03
Newton	Delaware								.04	.15					.03		.04	.04		.41	.06					.75	T.		.11	.11			1.74
Phillipsburg	...do	T.							T.	.05				.05	T		.04	.02		.34	T.	T.			.28	.13			1.25			T	2.16
Sussex	Hudson								.27	.17				.02	.11		T.	.07		.26	.27				*	.72			.14	.62			2.65
The Red Sandstone Plain.																																	
Bergen Point**	Coast									§							.02			.67		T.			.67	§			§	§		§	§
Boonton‖‖	Passaic	.30							T.	.09	.03				T.			.05			.88		T.			.94				.04			2.83
Chatham ‖	...do	.61							T.	.05					.16			.11			1.26					1.22				.56			3.97
Elizabeth	Coast	.03								.04				.03			.02	.07		.14	.83		.01			1.02	T.		.20	.15		.01	2.55
Flemington	Raritan	.21							.02	.13	.02			T.			T.	.12		.38	.51					.81			.10	.28		T.	2.58
Highwood	Hackensack	.14							T	.13	.07			T.	.05			.06			.80		T.			1.32				.35			2.92
Jersey City	Coast								T.	.01				T.			.05	T		.65	T.	.03			T.	.51			.12	.19		.01	1.57
Lambertville	Delaware	.10								.11				.02			.06	.03		.48	.35					.80	T.		.56	.28		.05	2.84
Little Falls‖‖	Passaic	.12								.11	.01				T.			.04			.89					1.03				.30			2.50
New Brunswick	Raritan	T.							T.	.02							T.	.04		.33	.37					.69			.07	T.		.02	1.54
New Milford.**	Hackensack									.10										.77					1.00	.28			.04				2.19
Paterson	Passaic								T.	.12				T.	T.		.02			.32	.30		T.		*	1.20			.20	.22			2.38
Plainfield	Raritan								T.	.05							.04			.93		T.			*	.91			*	.36		.01	2.30
Ridgefield	Hackensack								T.	.07							T.	.06		.65		T.			*	1.20	T.			.27	T.		2.25
Somerville	Raritan	.10								.08							T.	.08		.26	.74					.84			.02	.16		T.	2.28
South Orange	Rahway									§				T.				.05			.65	T				.45				.14			§
Verona**	Passaic								T.	.09				.05			.07	.02		.87						.76	.19		.21	.12			2.38
Woodcliff Lake**	Hackensack								.06	.12				.08			.06			.70					1.22	.20			.04				2.48
New York, N. Y***	Coast								T.	.01				T.			.05	T		.52	T	.03			.41	.09			.26	.03		.01	1.41
The Southern Interior.																																	
Belleplain	Tuckahoe									.17							*	.04			.54					.29			.30	.19		.15	1.68
Bridgeton	Coast									*							.03			.21	.21					.62			*	*		.40	1.47
Burlington	Delaware	.07								.04							T.	.01		.22	.23					.65			.30	1.00	T.		2.52
Clayton	Delaware	T.								.01							T.	.01		.51	.01				T.	.78			.16	.53		.04	2.05
Hammonton	Mullica																																
Hightstown	Raritan									.04				T.			T.			.17	.27					.77			*	.72		T.	1.97
Imlaystown	Delaware	.06								.01								.04		.07	.16					.60			.30	.50			1.74
Indian Mills	Mullica									.10							T	.08		.22	.35					.71			.58	1.74		T.	3.78
Lakewood	Metedeconk								T.	.02				T.			.01	.03		.30	.20					.43			.60	.45		T.	2.04
Moorestown	Delaware									.02							.02			.15	.25					.75			*	.75			1.94
Northfield	Coast									.13							.02			.19	.44					.44			.50	.10		.13	1.95
Pleasantville‖‖	Coast									T.	.15							.01			.68					.50				1.05		.13	2.52
Riverton‖‖	Delaware	.25								T.	.02							02			.47					.58			.03	.75			2.12
Runyon	Coast									.04										.40	.28					1.04			.10			.04	1.90
Trenton***	Delaware	.01					T.	T.	T.	.02				T.			T.	.01		.48	T.				.67	.03			.42	.10		T	1.74
Tuckerton	Coast									.08								.04		.06	.55					.36			.32	.44			1.85
Vineland	Maurice									.09											.40					.49			.30	.50			1.78
Phila., Pa***	Delaware									.01				T.			.01	T.		.47	T.				.47	.11			.76	.08	T.		1.91
The Sea Coast.																																	
Asbury Park	Coast									*							T			.65					.27	.10			.90	.25		T	2.17
Atlantic City***	...do									.15							.03	T.		.55					.39	.02			.84	.14	.02	.09	2.23
Cape May City	...do	T.								.27							T			.44	.03				.03	.29			.64	.18		.22	2.10
Long Branch	...do								T.	.08							.05			.53	T.	T.			.47	.06			.24	.03		.01	1.42
Sandy Hook***	...do									.01				.02			.04	.05		.51		T.			.44	.05			.18	.06	T.	.01	1.37

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	‖Percentage of possible sunshine
Atlantic City	30.05	30.56	16	29.14	25	17.7	68	s.	24	74	65	68	64
New York, N. Y	30.02	30.63	16	28.91	25	19.8	72	w.	25	60	53	61	76
Philadelphia, Pa	30.06	30.61	16	29.01	25	9.4	29	sw.	25	70	63	69	58
Ridgefield													
Riverton		30.60	16							73	55	64	
Sandy Hook	30.01	30.61	16	28.91	25	17.9	54	sw.	25	68	57	63	59
Trenton	30.03	30.58	16	28.97	24	12.3	44	w.	25	72	58	64	58
Verona													

Daily Temperatures for January, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	51	25	24	25	33	45	54	51	48	41	50	49	49	52	50	41	45	42	44	40	26	34	47	52	47	40	....	32	29	27	33	40.9[a]
	Minimum	16	9	10	9	13	21	29	33	35	30	30	36	35	36	34	19	27	31	27	18	13	13	24	22	27	17	19	10	13	12	0	20.8
Charlotteburg	Maximum	54	21	23	24	31	45	57	....	....	42	48	46	53	49	49	38	46	43	38	39	26	....	46	49	50	38	37	28	23	27	30	39.3[c]
	Minimum	15	7	3	6	16	19	32	40	36	31	33	35	35	38	37	13	23	34	26	25	11	11	15	17	26	15	7	12	16	−4	2	20.4
Dover	Maximum	46	24	28	25	33	45	55	41	43	41	49	46	50	48	49	31	46	43	38	40	33	32	47	50	50	....	....	27	20	....	32	39.7[c]
	Minimum	10	8	7	7	16	22	38	28	35	31	31	36	35	32	27	18	31	31	28	13	12	12	27	20	23	17	9	18	13	1	6	20.7
Layton	Maximum	48	27	23	27	30	48	60	49	43	39	49	45	54	47	54	30	47	43	37	40	21	34	47	51	45	37	25	25	23	27	31	38.9
	Minimum	14	8	0	2	13	21	27	37	35	29	34	34	34	38	30	15	24	30	22	18	11	12	27	17	27	15	4	14	15	−15	−5	18.9
Newton	Maximum	56	21	23	20	31	46	57	49	44	40	49	47	51	52	52	34	46	43	37	40	22	32	45	50	52	41	30	24	24	25	30	39.1
	Minimum	12	9	7	5	15	22	33	41	36	30	34	35	35	37	32	16	25	33	27	17	11	12	24	23	25	13	9	19	15	−2	8	21.2
Phillipsburg	Maximum	47	24	16	25	33	....	....	....	....	38	....	....	....	....	....	....	45	40	39	39	24	35	....	48	51	41	24	23	22	22	29	33.2[k]
	Minimum	14	13	13	11	17	23	29	34	34	32	30	37	36	35	32	22	29	33	30	18	15	16	22	25	26	22	14	20	13	−10	1	22.1
Sussex	Maximum	54	....	....	27	32	47	58	49	44	41	48	46	50	50	53	38	46	43	39	40	30	34	47	51	49	41	34	32	23	26	32	41.5[b]
	Minimum	16	9	6	8	15	21	26	37	35	30	32	36	35	39	37	17	24	31	24	27	12	12	24	20	33	17	8	16	16	−11	−4	20.9
The Red Sandstone Plain.																																	
Bergen Point	Maximum	56	25	27	....	....	....	....	51	45	43	53	48	56	50	52	47	48	43	43	42	....	37	47	50	....	....	....	....	....	....	....	45.4[l]
	Minimum	18	13	20	....	....	....	....	39	38	32	35	38	39	38	31	22	33	34	35	22	16	16	28	30	....	....	....	....	....	....	...	28.8[k]
Boonton§§	Maximum	33	28	24	28	34	46	57	50	45	43	52	49	53	50	54	43	48	45	44	40	28	36	48	56	45	43	35	26	27	31	35	41.2
	Minimum	28	10	10	10	10	18	29	31	35	27	29	30	31	33	35	15	17	35	26	28	13	14	15	20	21	17	7	10	13	1	5	20.1
Elizabeth	Maximum	57	25	27	27	36	48	58	52	....	....	....	....	56	....	....	42	49	46	42	42	31	36	49	54	54	43	42	29	29	31	35	41.6[f]
	Minimum	20	10	8	10	14	22	31	31	37	28	33	36	37	34	35	22	30	30	31	30	9	15	23	24	32	19	13	20	19	2	8	23.0
Flemington	Maximum	55	28	27	29	37	48	60	51	45	45	54	51	54	49	53	37	50	42	40	41	26	38	50	51	53	45	34	28	27	28	39	42.4
	Minimum	18	10	11	10	14	22	29	32	34	30	31	34	34	36	33	20	28	34	29	25	15	13	23	21	30	19	11	20	18	−3	3	22.1
Highwood	Maximum	56	31	25	26	33	46	57	51	42	42	50	45	51	49	52	34	46	44	41	40	25	35	47	50	53	41	29	27	27	23	31	40.3
	Minimum	16	11	7	9	15	24	30	33	37	28	32	35	34	38	33	18	28	33	29	20	15	15	26	23	29	21	20	19	17	−5	20	22.9
Jersey City	Maximum	54	25	28	29	37	46	55	51	46	45	52	47	54	49	53	39	47	45	46	42	25	34	47	50	53	42	31	30	28	26	34	41.6
	Minimum	17	11	15	12	18	29	38	42	40	33	36	37	39	40	35	23	32	36	36	22	14	15	28	33	27	22	17	19	17	11	18	26.2
Lambertville	Maximum	55	22	21	24	33	44	55	51	45	42	52	45	53	50	53	35	45	41	42	42	23	35	46	50	53	42	28	26	22	20	29	39.5
	Minimum	16	10	10	10	15	23	34	38	38	30	33	34	35	35	35	20	29	33	31	22	14	13	25	26	28	20	10	19	17	1	10	23.0
Little Falls§§	Maximum	32	32	21	26	35	47	58	52	44	42	52	49	54	51	54	41	48	44	40	38	36	36	48	50	47	45	32	....	28	25	35	41.4[a]
	Minimum	27	10	7	12	15	21	29	34	36	30	32	36	35	37	37	18	22	35	29	36	14	15	27	22	29	20	11	17	17	−1	8	23.1
New Brunswick	Maximum	58	24	24	26	34	47	57	52	47	43	54	49	55	51	55	40	46	44	42	43	26	36	48	53	55	43	33	27	26	25	32	41.8
	Minimum	18	11	11	11	16	24	35	38	36	29	34	34	36	36	36	20	30	34	30	26	15	15	26	25	32	20	14	20	18	4	11	24.0
Paterson	Maximum	49	25	25	26	34	45	58	50	46	43	50	46	53	48	52	39	46	45	40	48	24	34	47	50	51	41	31	25	26	25	33	40.5
	Minimum	20	12	12	13	19	26	33	37	40	33	33	29	37	42	29	20	28	36	32	24	16	16	27	27	30	21	16	22	19	10	15	25.0
Plainfield	Maximum	56	25	25	26	36	50	58	52	46	45	52	47	54	49	55	39	48	45	46	42	25	36	47	50	54	43	31	30	27	26	34	41.9
	Minimum	13	10	7	11	16	30	33	36	38	28	32	34	35	39	33	20	32	34	31	25	13	13	25	23	32	20	10	16	17	0	5	22.9
Ridgefield	Maximum	42	24	23	24	32	44	57	50	43	41	50	45	52	47	53	30	45	42	40	40	23	33	45	52	51	40	28	25	27	22	32	38.8
	Minimum	13	11	11	12	16	24	33	38	34	30	34	34	38	38	26	18	30	32	31	15	14	15	25	25	22	20	14	17	10	5	13	22.5
Somerville	Maximum	51	27	25	27	35	44	59	50	43	44	54	52	55	50	52	38	47	43	41	43	29	38	49	....	54	45	36	27	27	27	35	41.6[a]
	Minimum	20	12	7	11	15	20	29	30	35	24	30	35	35	34	33	19	29	33	29	28	15	14	23	19	32	19	10	17	19	−3	2	21.8
South Orange	Maximum	....	....	....	....	....	....	....	....	....	...	53	51	53	51	55	....	48	46	41	41	29	....	49	53	52	44	41	27	...	29	35	44.3[m]
	Minimum	....	....	....	....	....	....	....	....	....	....	30	34	35	37	....	19	29	32	30	28	14	12	....	22	30	17	11	20	....	4	8	22.9[m]
Verona	Maximum	55	22	23	25	32	45	56	50	44	41	50	46	52	47	51	31	45	42	39	40	22	34	46	51	52	39	29	24	25	23	31	39.1
	Minimum	14	9	9	10	16	24	37	43	38	32	34	36	36	38	31	18	29	33	32	19	13	13	27	28	25	19	12	18	16	8	8	23.4
New York, N. Y.	Maximum	47	25	28	29	37	45	55	51	46	45	52	47	54	48	53	39	48	45	46	42	24	34	47	50	52	42	31	30	29	27	34	41.4
	Minimum	13	11	15	13	18	29	39	43	40	34	36	38	39	40	30	23	32	37	36	16	14	16	29	35	24	22	18	20	17	13	19	26.1
The Southern Interior.																																	
Belleplain	Maximum	57	25	27	28	34	....	60	59	....	44	59	54	59	57	65	48	53	47	46	50	30	....	....	....	....	...	45	35	23	23	35	44.3[g]
	Minimum	18	10	2	3	11	17	....	28	27	....	30	25	34	37	42	23	33	30	32	30	16	14	....	....	35	10	....	20	14	−8	16	21.1[e]
Bridgeton	Maximum	56	24	24	28	35	50	60	57	52	....	58	54	60	55	64	46	58	50	44	48	30	37	49	51	53	45	43	33	22	28	33	44.9[a]
	Minimum	15	11	10	9	17	23	30	32	33	32	28	31	37	37	43	25	32	37	37	30	17	17	26	26	35	21	15	20	14	−6	11	24.0
Burlington	Maximum	57	24	25	26	35	47	57	55	53	46	56	51	56	54	52	41	50	47	44	47	31	35	48	55	56	46	42	32	25	24	33	43.5
	Minimum	22	13	13	12	19	24	32	37	34	28	34	37	39	38	37	28	31	36	34	31	17	17	24	23	34	21	20	15	14	−4	10	24.8
Clayton	Maximum	58	24	24	27	34	49	60	55	45	47	59	51	58	56	62	44	53	44	49	51	49	35	49	53	55	44	36	34	24	25	32	44.7
	Minimum	18	11	11	10	15	23	33	34	36	28	34	33	39	37	39	25	31	37	36	24	16	15	27	29	30	20	15	23	14	−7	8	24.0
Hightstown	Maximum	40	30	25	26	34	47	57	54	46	44	56	50	57	53	55	40	50	45	43	46	31	36	49	55	55	45	35	28	27	25	33	42.5
	Minimum	18	11	9	11	16	24	31	32	35	30	31	30	34	36	34	20	30	34	30	29	11	10	21	23	32	21	11	19	19	−9	3	22.1
Imlaystown	Maximum	53	22	22	23	....	....	....	....	49	....	....	50	57	54	55	39	48	46	42	48	31	35	48	53	54	44	41	31	26	24	31	41.0[f]
	Minimum	19	11	11	10	14	23	33	35	36	28	32	32	35	36	37	20	31	33	30	29	15	15	26	22	32	20	12	22	17	−7	2	22.9
Indian Mills	Maximum	58	28	23	26	35	50	60	57	54	46	58	52	60	57	61	46	52	48	49	49	31	38	50	53	56	47	44	32	26	25	33	45.3
	Minimum	21	10	5	6	7	20	33	30	36	26	28	29	36	37	43	27	32	33	33	29	16	10	25	23	35	15	9	24	16	−9	7	22.3
Lakewood	Maximum	55	27	25	25	33	46	57	55	47	43	56	47	60	56	57	40	48	44	46	50	27	35	48	52	59	45	35	32	30	23	32	43.1
	Minimum	18	10	9	10	14	22	36	32	36	27	30	30	36	37	33	21	34	29	31	27	15	13	27	18	31	17	10	18	17	−5	7	22.4
Moorestown	Maximum	50	21	20	29	33	49	58	59	48	47	59	54	57	59	59	40	56	44	44	46	29	36	56	57	55	45	36	30	29	30	36	44.2
	Minimum	19	10	12	12	15	22	32	37	35	29	33	32	36	35	37	29	29	34	33	29	15	15	23	23	32	19	14	15	14	−4	9	23.4
Pleasantville§§	Maximum	41	28	25	28	36	50	62	60	44	48	61	51	60	54	65	43	56	46	51	44	37	37	52	55	44	45	35	38	36	23	32	44.7
	Minimum	28	11	7	6	10	18	30	29	33	27	29	27	30	37	37	23	27	33	32	37	16	12	20	19	41	18	12	18	17	10	17	22.9
Riverton	Maximum	42	24	23	26	34	48	57	53	43	45	57	49	56	52	60	32	51	42	46	42	24	34	50	55	53	44	32	28	23	23	31	41.3
	Minimum	12	10	12	12	17	24	33	37	32	30	35	35	41	40	31	24	33	36	35	18	16	16	28	22	23	21	14	20	11	1	11	23.5
Runyon	Maximum	42	25	24	27	35	49	58	55	44	45	56	52	56	....	56	46	49	40	46	38	27	36	49	55	54	48	40	28	27	27	31	42.2[a]
	Minimum	25	11	0	8	11	21	34	28	34	23	27	30	34	35	24	18	31	31	30	27	16	15	27	15	28	15	3	14	11	−4	7	20.3
Trenton	Maximum	42	23	25	28	35	49	58	52	46	47	56	52	56	51	56	38	49	43	46	41	23	36	50	55	55	45	35	28	25	28	34	42.2
	Minimum	15	13	12	13	19	27	34	38	36	32	36	38	39	39	30	24	31	35	35	18	16	16	28	34	23	21	18	20	11	7	16	25.0
Tuckerton	Maximum	48	22	26	28	37	52	60	59	44	45	60	58	60	58	64	53	54	53	44	50	....	38	51	49	53	46	....	35	32	21	34	46.0[b]
	Minimum	20	11	9	10	15	20	33	34	34	27	33	29	35	36	41	22	36	34	35	....	16	13	27	24	39	19	14	22	16	10	14	24.3[a]
Vineland	Maximum	57	25	25	28	35	50	60	58	50	47	59	52	62	56	65	48	54	48	45	50	30	34	50	54	54	46	43	34	27	30	36	45.5
	Minimum	20	11	11	11	15	22	30	33	37	27	32	30	36	37	42	25	33	37	38	30	17	15	27	30	35	20	19	23	14	0	15	24.9
Philadelphia, Pa.	Maximum	45	25	26	27	36	51	59	55	50	49	59	50	56	52	61	35	52	45	47	44	26	34	51	54	54	47	34	31	26	25	34	43.2
	Minimum	14	12	15	15	22	28	36	41	40	35	36	40	41	42	35	30	32	41	40	20	18	18	31	36	26	24	23	21	18	14	21	27.9
The Sea Coast.																																	
Asbury Park	Maximum	50	....	27	26	34	48	58	55	47	43	56	48	59	52	57	43	49	45	50	46	....	36	49	48	...	45	33	36	29	26	33	43.9[c]
	Minimum	15	13	12	13	17	26	40	40	39	31	34	37	40	40	34	29	36	37	36	17	17	15	24	30	25	20	18	20	12	8	17	25.5
Atlantic City	Maximum	48	26	26	28	35	45	57	57	45	48	60	51	56	52	64	44	55	46	50	46	24	37	50	54	49	46	36	37	24	26	33	43.7
	Minimum	16	12	14	12	20	34	38	42	36	34	39	35	41	41	34	28	38	39	40	21	17	17	34	40	26	24	21	20	14	10	20	27.6
Cape May City	Maximum	42	24	24	27	34	47	56	54	44	47	54	50	57	51	63	43	52	46	50	46	24	38	50	52	48	45	37	38	23	29	36	42.9
	Minimum	16	14	15	16	25	31	38	34	33	32	36	36	42	42	33	30	35	38	40	24	19	20	34	37	29	25	20	20	18	10	22	27.9
Long Branch	Maximum	22	24	22	33	43	47	53	54	55	44	52	49	59	54	60	40	45	48	47	40	22	33	47	47	50	35	28	29	24	22	28	40.5
	Minimum	8	10	8	14	25	27	32	37	38	27	36	34	37	36	30	27	37	32	37	15	10	8	25	24	19	17	10	20	13	0	10	22.7
Sandy Hook	Maximum	45	25	24	25	33	44	53	47	44	42	51	47	54	47	50	40	44	41	47	42	24	35	45	49	50	42	27	28	27	25	32	39.6
	Minimum	15	13	16	15	21	28	38	37	37	34	37	39	40	39	33	26	35	38	37	19	17	18	32	31	26	24	20	20	19	16	20	27.1

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	*	*	*	*	*	*	*	*	*	*	*	.096	.080	*	*	.106	.128	*	.040	*	*	*	*	.372	*	*	*	*	*	*	*	.822
	Wind movement	138	61	57	43	64	67	37	71	*	50	52	82	90	115	86	75	68	46	104	188	112	121	49	182	155	123	76	*	153	*	70	2,535
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	..	....	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

7.05
VNJ

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UNIVERSITY OF ILLINOIS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

G. HAROLD NOYES, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. FEBRUARY, 1928. No. 2

GENERAL SUMMARY.

February completed the fifth consecutive month with warmth above normal. October was 1.8° above normal, November 5.0°, December and January 2.6° each, and February 2.4°, all above normal. This is reflected in popular opinion that this was one of the mildest winters on record. Only half as much snow as usual fell, and pond ice over more than two thirds of the State was insufficient for harvest. Over nearly all the southern half of the State but a fraction of an inch of snow was measured. Rainfall was nearly evenly distributed throughout the State, being slightly more in the northern than in the southern portions. There were cold waves on the 6th, 19th, and 25th, but they were not severe, and were of brief duration. During nearly all other portions of the month, temperatures were warmer than normal. There were no severe storms during the month.

The frost being out of the ground the greater portion of the month, considerable scattered plowing was accomplished from central counties southward.

Storm warnings were displayed on the 8th, 14th, 18th, 22d and 25th.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 40 stations, was 32.1°, which was 2.4° above normal. The highest temperature was 63° at Pleasantville and Tuckerton on the 23d, and the lowest, 6° below zero, at Layton on the 22d. The greatest daily range of temperature was 47° at Boonton on the 23d. The highest monthly mean temperature was 35.8° at Vineland, Atlantic City and Cape May City, and the lowest, 28.0° at Layton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +3.6°; Red Sandstone Plain, +2.4°; Southern Interior, +2.4°; Sea Coast, +1.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 4.05 inches, which was 0.30 inch above normal. The average total snowfall at twenty selected stations was 4.4 inches, which was 4.5 inches below normal.

The greatest monthly precipitation was 5.63 inches, at Chatham, and the least, 2.17 inches at Phillipsburg. The greatest amount of precipitation in any 24 consecutive hours was 1.85 inches at Verona on the 22-23d. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or 1 more than normal.

The precipitation accumulated departure from the normal for the year 1928, to date, by sections, is: The Highlands, —0.96 inch; Red Sandstone Plain, —0.34 inch; Southern Interior, —1.53 inches; Sea Coast, —1.93 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 12 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 80 miles per hour from the southeast at Atlantic City on the 23d. High winds also occurred on the 8th, 14th, 15th, 19th, 20th and 23d.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 12, which was 1 more than normal; partly cloudy, 7, or 2 less than normal; cloudy, 10, or 1 more than normal. The per cent of possible sunshine was 55, which was 1 per cent below normal.

MISCELLANEOUS.

Atmospheric pressure reduced to sea level, was 30.09 inches, which was 0.01 inch below normal. The highest reading was 30.74 inches at Sandy Hook on the 6th, and the lowest, 29.21 inches at Verona on the 18th.

The mean stage of the Delaware River at Phillipsburg was 3.4 feet, and the highest stage was 5.0 feet on the 2d. At Trenton the mean stage was 2.5 feet, which was 1.0 foot below normal. The highest reading was 3.6 feet on the 2d.

Dense fog occurred on the 4th, 7th, 8th, 9th and 23d. Thunderstorms were noted on the 8th, 9th and 14th. Sleet fell on the 1st, 8th, 14th and 17th. A solar halo was observed on the 22d and a lunar halo on the 28th.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	23.9	54	−2	3.93	5.85	1.44	......	......	......	......	......
1886	28.9	64	−10	5.42	8.00	4.13	......	......	......	......	......
1887	33.9	69	6	5.24	6.74	4.13	......	......	......	13	13
1888	30.6	60	−5	3.53	6.01	2.04	......	......	......	9	8
1889	27.7	53	−3	2.49	3.80	1.65	......	......	......	9	8
1890	**39.9**	**76**	**14**	4.17	5.32	2.43	......	......	......	12	10
1891	38.0	71	1	5.11	7.20	3.70	......	6	9	13	14
1892	33.6	58	7	1.63	3.62	0.67	......	7	9	13	7
1893	30.1	63	−1	5.73	8.90	3.14	.....	7	8	13	11
1894	29.7	62	−11	4..42	6.17	3.25	......	9	8	11	11
1895	23.6	57	−12	1.28	2.34	*0.55*	11.6	13	9	6	5
1896	32.1	62	−12	**6.77**	**10.06**	**4.82**	6.7	9	9	11	12
1897	32.5	59	−6	3.61	6.37	2.38	8.0	8	10	10	8
1898	32.7	65	−15	3.48	5.45	1.55	2.0	12	7	9	9
1899	25.8	60	−17	6.06	8.77	3.78	**31.3**	10	6	12	15
1900	31.0	69	−6	5.30	7.88	3.27	9.6	9	9	10	10
1901	25.4	*52*	−6	*0.94*	*1.65*	0.69	4.9	15	9	4	4
1902	27.4	62	−7	6.24	8.44	4.29	16.5	12	6	10	9
1903	33.7	70	−16	4.87	6.60	3.74	6.7	12	8	8	10
1904	24.8	65	−16	2.45	3.09	1.36	5.6	13	8	8	8
1905	*23.4*	53	−18	2.53	3.96	0.70	7.3	14	7	7	7
1906	30.9	64	−12	2.58	3.85	1.77	5.4	14	7	7	7
1907	23.6	55	−22	2.67	3.90	1.82	20.8	14	7	7	8
1908	28.1	65	−17	4.79	7.44	2.85	11.9	10	10	9	9
1909	37.8	72	−2	4.96	6.78	3.55	2.3	6	10	12	12
1910	30.5	69	−11	3.08	4.81	1.06	6.2	10	9	9	10
1911	30.9	67	−12	2.78	4.06	1.76	11.2	8	7	13	11
1912	27.7	61	−14	2.49	3.12	1.68	2.8	11	12	6	5
1913	30.6	70	−5	2.49	3.21	1.48	3.5	16	6	6	7
1914	25.9	67	−12	2.85	4.94	1.89	15.1	12	7	9	9
1915	35.7	75	−7	5.37	7.28	2.97	3.5	11	6	11	8
1916	28.1	63	−18	4.21	6.17	2.84	11.4	10	6	13	11
1917	28.1	62	−19	1.95	2.80	0.92	8.3	10	9	9	11
1918	29.0	67	*−23*	2.08	3.41	1.03	2.6	12	8	8	7
1919	33.6	65	4	3.39	6.48	1.37	1.2	15	4	9	10
1920	27.9	54	−17	4.20	7.20	2.39	20.0	11	8	10	11
1921	34.0	71	−5	3.81	5.82	2.58	13.6	10	8	10	10
1922	33.6	73	−10	2.94	4.60	1 80	8.5	10	8	10	10
1923	26.1	56	−12	2.58	3.74	1.51	13.8	10	8	10	12
1924	28.9	62	−3	4.10	6.11	2.45	11.9	13	5	11	9
1925	37.3	72	−1	2.23	4.64	1.18	*0.7*	12	6	10	7
1926	29.4	57	−11	4.54	6.30	2.86	21.2	9	5	14	11
1927	36.1	66	4	3.12	4.55	2.18	5.1	10	8	10	11
1928	32.1	63	−6	4.05	5.63	2.17	4.4	12	7	10	10

W. B. O. Philadelphia-3-22-28-910.

Climatological Data for February, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	29.7	+2.6	52	23	3	3†	38	4.29	+0.31	1.02	5.5	10	18	4	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	29.0	+3.4	54	23	−4	22	40	5.01	+0.85	1.73	9.7	11	5	6	18	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	−3	26	....	3.20	+0.03	0.88	11.6	9	13	5	11	e.	Brice E. Riker.
Dover	Morris	600	44	29.4[b]	+3.2	52	23	1	22†	36	4.63	+0.46	1.31	9.0	9	8	13	8	......	William C. Harris.
Layton	Sussex	480	27	28.0	+4.4	55	23	−6	22	42	3.62	+0.78	1.46	8.5	9	11	4	14	sw.	A. M. Depue.
Newton	Sussex	769	44	28.8	+2.3	52	23	1	26	30	3.02	−0.67	0.78	10.3	10	13	5	11	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	30.8[d]	+2.9	52	23	4	1	30	2.17	−1.60	0.48	14.0	9	16	5	8	......	Town Engineer.
Sussex	Sussex	442	33	29.2[b]	+3.8	53	23	−4	22	41	3.52	+0.02	0.86	7.9	9	14	8	7	w.	A. J. W. Mowatt.
Means and extremes	......	......	....	29.3	−3.2	55	23	−6	22	42	3.68	+0.02	1.73	9.6	10	12	6	11	sw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	......	......	......	......	......	......	....	......	......	......	......	....	...	....	....	......	William Mann.
Boonton	Morris	400	§38	28.8	+1.7	55	23	3	22	47	4.48	+0.37	1.30	......	10	16	0	13	sw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	....	5.63	+2.08	1.37	5.5	10	19	3	7	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	33.3[b]	+2.8	56	23	5	26	30	4.33	+0.01	1.25	5.1	11	14	10	5	w.	Union County Park Com
Flemington	Hunterdon	140	§42	31.8	+3.0	56	23	6	22†	35	5.01	+1.34	1.39	8.5	12	16	3	10	w.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	30.8	+2.4	54	23	5	26	32	4.91	+0.50	1.44	7.0	9	12	6	11	nw.	Charles J. Bates.
Jersey City	Hudson	10	30	33.2	+2.6	55	23	6	26	22	4.61	+0.76	1.27	4.2	10	11	8	10	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	30.8	+0.4	52	23	5	26	30	5.38	+1.78	1.38	6.8	13	16	3	10	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	30.6	+1.0	55	23	5	26	37	5.16	+1.57	1.60	4.5	9	16	8	5	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	75	32.2	+1.4	55	23	6	26	29	4.64	+0.39	1.36	7.8	11	15	6	8	s.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	......	....	4.15	......	1.43	......	11	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	32.6	+2.4	55	23	7	26	28	4.93	+0.57	1.56	5.5	11	14	8	7	nw.	Marion T. Probert.
Plainfield	Union	120	40	31.2	+2.5	55	23	4	26	33	5.11	+1.01	1.45	5.0	11	13	5	11	nw.	E. D. Pearson.
Ridgefield	Bergen	80	11	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	George P. Kirsten.
Somerville	Somerset	70	45	32.1	+3.2	56	23	6	26	34	4.69	+0.78	1.42	5.0	11	15	3	11	w.	H. B. TenEyck.
South Orange	Essex	200	58	31.8[a]	+2.8	57	23	4	26	33	§	....	1.51	5.0	11	8	10	11	w.	Everett W. Bird.
Verona	Essex	490	2	30.4	....	53	23	3	26	25	5.32	....	1.85	8.1	12	10	8	11	nw	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	32.9	+1.6	55	23	6	26	22	4.35	+0.53	1.37	4.0	11	9	9	11	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	31.5	+2.2	57	23	3	22†	47	4.88	+0.97	1.85	6.0	11	14	6	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	34.0[a]	+2.5	61	23	7	26	37	2.44	−1.28	0.94	T.	9	13	6	10	sw.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	34.8	+1.1	58	23	11	26	30	2.63	−1.33	0.63	0.5	10	10	7	12	sw.	Paul T. Kornman.
Burlington	Burlington	12	§42	34.1	+2.8	58	23	9	26	31	3.79	+0.17	1.28	0.4	10	14	7	8	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	33.8[e]	+3.1	59	23	10	26	29	3.65	−0.06	0.95	2.0	13	7	13	9	nw	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Hightstown	Mercer	120	34	32.6	+3.2	57	23	7	26	32	4.48	+0.75	1.26	......	12	13	5	11	nw.	Charles Welsh.
Imlaystown	Monmouth	115	37	32.5[h]	+2.1	55	23	......	......	29	3.80	+0.13	1.20	......	11	7	9	13	nw.	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	34.0	+2.2	59	23	6	3	37	4.09	+0.52	1.04	2.0	9	10	8	11	nw	James M. Armstrong.
Lakewood	Ocean	54	24	32.6	+2.9	56	23†	7	26	39	4.37	+0.67	1.18	1.6	12	12	4	13	w.	R. W. Holman.
Moorestown	Burlington	75	65	33.6	+2.3	59	29	9	26	38	3.77	+0.17	1.15	1.0	9	13	8	8	nw.	John B. Warrick.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	....	2.87	−0.02	1.08	......	9	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	33.4[d]	......	63	23	7	3	44	2.91	0.00	1.35	....	9	20	4	5	nw.	N. J. Dept. Conservation.
Riverton	Burlington	......	2	32.8	......	58	23	9	26	30	3.87	....	1.19	0.5	9	8	7	14	nw.	Japanese Beetle Laboratory
Runyon‡‡	Middlesex	18	4	31.5	......	56	23	3	1	39	4.20	....	1.08	......	9	13	11	5	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	32.5	+1.8	56	23	7	26	26	4.09	+0.78	1.36	2.7	9	9	7	13	nw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	34.2	+3.4	63	23	7	26	33	3.22	−0.57	1.12	......	9	9	8	12	w.	John H. Brown.
Vineland	Cumberland	109	59	35.8	+3.3	61	23	10	26	31	2.66	−1.19	0.92	......	9	13	10	6	nw.	H. C. Himes
Philadelphia, Pa.	......	117	57	35.1	+1.2	59	23	11	26	25	4.00	+0.57	1.20	1.0	10	10	6	13	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	33.5	+2.6	63	23	3	1	44	3.55	−0.09	1.36	1.2	10	11	8	10	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	33.4	+2.0	57	23	8	26	31	4.17	+0.55	1.20	1.0	10	18	8	3	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	35.8	+2.2	62	23	11	26	24	2.72	−0.76	0.74	1.2	9	10	11	8	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	35.8	+1.7	62	23	12	26	25	§	§	0.71	0.1	9	9	10	10	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	30.6	+0.2	56	23	6	26	29	3.85	−0.20	0.83	2.9	11	8	10	11	w.	William D. Martin.
Sandy Hook	Monmouth	22	30	32.6	+2.0	50	4	9	26	21	4.71	+1.04	1.28	2.7	9	11	6	12	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	33.6	+1.6	62	23	6	26	31	3.86	+0.16	1.28	1.6	10	11	9	9	nw.	
For the State	......	......	....	32.1	+2.4	63	23	−6	22	47	4.05	+0.30	1.85	4.4	10	12	7	10	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood: Indian Mills is Atsion: New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for February, 1928

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.07				.20		.07	.92			.14			.15	.83			.89					1.02									4.29
Charlotteburg	Passaic	.07				.11		.02	1.04	.08					.04	1.69			.85	.09				1.02									5.01
Culvers Lake	Delaware	.02		T.		.05		T.	.69	T.	T				.10	.70		T.	.72	.02	.02			.88									3.20
Dover	Passaic	.10				.02		*	1.17						*	1.31		*	.80					1.23									4.63
Layton	Delaware	.02				.10		.03	.52	.09					.38	1.08			.72		T.			.68									3.62
Newton	Delaware	.08		T		.04		.02	.76	.06		T.	T		.22	.52			.68	.02				.62					T.				3.02
Phillipsburg	do	.08		T.	T.	.21		.28	.17	.05	T.	.03			.48		T.	T.	.45		T.		T.	.42									2.17
Sussex	Hudson	.08		T		.11		.02	.64	.12					.10	.80			.79					.86									3.52
The Red Sandstone Plain.																																	
Bayonne	Coast																																.....
Boonton ‖‖	Passaic	.04				.08			1.02	.17						1.21			.38	.28				1.30									4.48
Chatham ‖	do	.09				.31			1.22	.26						1.29	.07		.63	.39				1.37									5.63
Elizabeth	Coast	.03				.17		.06	1.23	.09					T.	.79			.70	.01	T			1.25									4.33
Flemington	Raritan	.09				.24		.16	1.39	.16		.01			.23	.76			.65	.16				1.16	T.								5.01
Highwood	Hackensack	.04		T.		.24			.97	.28						1.19			.43	.32				1.44									4.91
Jersey City	Coast	.06		T.		.19		.24	1.27	.05					1.03	T.			.66	T.				1.11									4.61
Lambertville	Delaware	.04				.19		.25	1.37	.20	T	.04			.50	.88	.02		.65	.02	T			1.22									5.38
Little Falls ‖‖	Passaic	.05				.11			1.18	.14						1.30			.64	.14				1.60									5.16
New Brunswick	Raritan	.06				.20		.08	1.36	.10		T.			.10	.91			.57	.03				1.23									4.64
New Milford**	Hackensack	.05				.14		.43	.67	.05					.89				.08	.19	.22		.14	1.29									4.15
Paterson	Passaic	.05		T		.09		.02	1.15	.07					.25	.93			.81		T.			1.56						T.			4.93
Plainfield	Raritan	.05				.17		.38	1.07	.10		T.			.29	.80			.80		T.			1.45									5.11
Ridgefield	Hackensack																																......
Somerville	Raritan	.07				.20		.09	1.42	.14		T.			.10	.82			*	.52				1.33									4.69
South Orange	Rahway	.04				§		.04	.99	.06					T.	.74			.72					1.51									§
Verona**	Passaic	.06			.01	.19		.52	.74	.06					.98			.08	.82	.01	T.		.18	1.67									5.32
Woodcliff Lake**	Hackensack																																.....
New York, N. Y***	Coast	.06		T.		.19		.46	.95	.03					1.05	T.		.02	.58	T.	T.		.12	.88						.01			4.35
The Southern Interior.																																	
Belleplain	Tuckahoe	T.				.13		.06	.60	.02						.94	T.		.48					.21									2.44
Bridgeton	Coast	.12				T.		.31	.63	.03		T.			.27	.45			.55					.27									2.63
Burlington	Delaware	.07				.22		.13	1.15	T.	T.	T.			.09	.58			.41	.07				1.07									3.79
Clayton	Delaware	.01				.20		.29	.71	.02		.03			.53	.32	.02		.57				.01	.94									3.65
Hammonton	Mullica																																.....
Hightstown	Raritan	.07				.29		.14	1.26	.09	T.	.04			*	.95			.48	.12				1.04									4.48
Imlaystown	Delaware	.08				.24		.13	1.20		T.	.03			.03	.60			.61	.24				.64									3.80
Indian Mills	Mullica	.12				.38		.18	.77						T	.87	T.		.40	.33				1.04									4.09
Lakewood	Metedeconk	.10				.22	T	.18	.95	.08		.02			.20	.98			.65	.04				.95									4.37
Moorestown	Delaware	.06				.26		.10	1.15			T.			.68				.55					.97									3.77
Northfield	Coast	.15				.16		.06	.62						.46	.62			.47					.33									2.87
Pleasantville ‖‖	Coast	.18				.18		T.	.45			T.				1.35			.35	.01				.39									2.91
Riverton ‖‖	Delaware	.08				.23			1.19	.12		T.				.60			.40	.14				1.11	T.								3.87
Runyon	Coast	.04				.27		.25	1.06	.16					.40	.46			.48					1.08									4.20
Trenton***	Delaware	.07			T.	.18		.62	.77	T.	T.	T.	T		.88	T	T.	.05	.48				.09	.95						T.			4.09
Tuckerton	Coast	.16				.17		.12	.68							1.12			.52					.45									3.22
Vineland	Maurice	.05				T.		.20	.60						.32	.60		.01	.53					.35									2.66
Phila., Pa***	Delaware	.05				.25		.51	.70			.01			.74		T.	.03	.56				.06	1.09						T.			4.00
The Sea Coast.																																	
Asbury Park	Coast	T				.20		.50	.70	.12		T			1.20				.50					.95									4.17
Atlantic City***	do	.16				.21		.09	.64			T			.74		T.	.12	.36				.02	.38									2.72
Cape May City	do	.24				.16		.02	.71	T.		T.	.01		.53	.05	T.		.58					§									§
Long Branch	do	.03				.26		.50	.60	.01		T.			.69	.02			.83				.29	.53						.09			3.85
Sandy Hook***	do	.10			T.	.30		.58	.79	T.		T.			1.15	T		.05	.56				.14	1.04						T.			4.71

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.10	30.69	6	29.29	18	15.8	80	se.	23	82	77	78	55
New York, N. Y	30.09	30.72	6	29.26	18	16.6	49	se.	14	69	57	60	66
Philadelphia, Pa	30.12	30.74	6	29.32	18	10.5	35	se.	14	73	65	66	57
Ridgefield	......	......	......	......	......	......	......	......	......	......	......	......	......
Riverton	......	......	......	......	......	......	......	......	......	79	61	68	......
Sandy Hook	30.08	30.74	6	29.25	18	14.7	46	w.	20	72	64	64	57
Trenton	30.09	30.71	6	29.28	18	10.2	37	nw.	20	74	62	68	53
Verona	30.08	30.73	6	29.21	18	7.5	23	se.	14	70	54	55	......
Long Branch	30.10	30.70	6	29.28	18	......	......	......	....	70	......	64	......

Daily Temperatures for February, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	36	31	31	49	41	33	32	42	43	41	37	36	40	45	46	43	44	41	33	38	26	41	52	45	35	28	41	42	50	....	....	39.4
	Minimum	4	12	3	21	29	10	15	32	32	29	24	20	13	26	31	33	32	30	9	15	9	3	33	33	15	4	18	20	24	....	....	20.0
Charlotteburg	Maximum	38	35	28	52	52	....	34	50	49	36	36	33	40	38	41	41	43	38	30	35	26	36	54	41	38	23	40	38	49	....	....	39.1^{a}
	Minimum	2	11	3	27	27	6	18	31	36	28	20	19	10	19	36	34	35	29	8	20	6	−4	31	33	14	0	14	19	17	....	....	18.9
Dover	Maximum	37	32	31	51	48	....	34	50	46	35	35	37	40	48	49	41	41	38	29	36	27	37	52	....	....	....	40	35	49	....	....	39.9^{d}
	Minimum	8	15	5	28	22	8	12	32	33	28	22	21	13	12	35	34	38	24	8	18	6	1	32	28	10	1	17	20	21	....	....	19.0
Layton	Maximum	28	32	29	51	46	30	30	47	43	35	35	35	40	44	49	46	44	36	31	37	23	36	55	48	30	24	40	38	48	....	....	38.3
	Minimum	1	7	−2	20	24	6	9	30	35	30	21	19	9	23	35	35	33	30	7	20	5	−6	25	30	11	0	16	18	22	...	....	17.7
Newton	Maximum	35	35	29	49	45	29	30	42	43	36	35	35	40	45	48	41	43	34	31	35	26	36	52	46	32	24	39	38	47	....	....	37.9
	Minimum	13	13	9	24	26	6	13	30	32	27	21	20	13	31	32	35	33	28	6	16	7	6	32	31	13	1	16	19	21	....	....	19.8
Phillipsburg	Maximum	34	30	31	47	40	....	34	....	43	36	....	....	38	49	48	40	....	35	....	...	23	39	52	44	34	25	41	39	51	....	....	38.8^{g}
	Minimum	4	15	9	23	25	14	20	33	35	32	29	24	18	29	33	35	34	....	12	21	14	....	35	28	16	7	19	24	25	....	....	22.7^{b}
Sussex	Maximum	35	35	30	49	46	37	31	42	44	36	35	35	41	38	48	41	45	41	39	34	28	37	53	50	41	31	40	....	....	....	....	39.3^{b}
	Minimum	1	10	−1	24	27	7	10	31	35	30	23	20	11	23	34	35	34	30	8	19	9	−4	32	33	15	2	17	....	....	...	....	19.1^{b}
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boonton§§	Maximum	38	30	34	54	42	33	35	51	48	35	38	37	43	49	47	44	44	37	31	41	25	42	55	42	33	26	40	39	50	....	....	40.1
	Minimum	8	15	6	15	23	9	9	20	32	30	22	22	13	19	27	32	33	31	10	10	9	3	8	33	16	4	5	21	20	....	....	17.4
Elizabeth	Maximum	40	41	39	52	47	36	38	51	51	40	42	....	37	52	50	43	43	43	....	41	35	42	56	54	39	26	44	42	52	....	....	43.6^{b}
	Minimum	12	....	14	26	24	12	16	33	34	32	25	22	18	23	34	32	33	31	12	16	14	12	36	36	19	5	25	24	23	....	....	23.0^{a}
Flemington	Maximum	38	35	34	52	47	35	33	44	45	39	39	39	43	47	49	43	45	40	33	40	30	41	56	51	36	30	45	39	53	....	....	41.4
	Minimum	9	19	8	22	35	14	16	32	34	32	27	23	16	26	33	34	33	32	10	16	13	6	33	36	19	6	19	22	22	....	....	22.3
Highwood	Maximum	38	36	32	49	43	27	33	45	48	38	37	37	37	48	49	44	45	39	31	39	26	38	54	45	34	24	43	37	51	....	....	39.6
	Minimum	6	18	8	26	25	11	14	33	36	31	26	21	17	24	35	34	32	29	12	22	12	9	35	33	17	5	20	22	24	....	....	22.0
Jersey City	Maximum	39	32	36	52	45	30	38	47	50	39	39	38	39	50	49	46	45	38	29	40	27	40	55	51	30	25	41	38	51	....	....	40.7
	Minimum	28	20	20	33	29	14	21	38	36	32	29	24	20	30	36	36	37	29	14	20	14	19	38	30	18	6	19	24	29	....	...	25.6
Lambertville	Maximum	38	35	34	49	48	30	34	44	45	37	36	34	37	48	48	40	42	38	31	38	25	41	52	46	35	24	41	38	49	....	....	39.2
	Minimum	17	16	13	24	30	14	15	33	36	31	27	21	15	26	36	34	34	31	10	17	13	11	33	33	18	5	19	22	22	....	....	22.5
Little Falls§§	Maximum	39	32	35	53	40	38	35	47	45	34	32	38	42	....	44	42	43	36	33	38	32	43	55	41	37	29	41	36	48	....	....	39.6^{a}
	Minimum	12	19	0	20	38	10	13	23	34	32	24	21	17	23	32	34	36	31	12	20	12	6	32	37	18	5	11	23	22	....	..	21.6
New Brunswick	Maximum	39	40	34	51	47	33	33	45	47	39	35	36	38	48	52	43	43	42	35	40	31	40	55	52	38	28	43	44	52	....	....	41.5
	Minimum	15	18	12	25	33	13	15	32	35	32	25	22	18	24	34	33	35	31	12	17	14	11	35	34	19	6	19	25	23	....	...	23.0
Paterson	Maximum	38	34	33	54	49	32	31	45	50	38	37	39	40	46	48	44	45	42	32	41	....	35	55	48	35	25	41	37	52	....	....	40.9^{a}
	Minimum	20	19	17	30	21	12	18	31	37	33	28	24	20	27	37	37	34	32	13	21	14	13	35	35	20	7	20	25	27	....	....	24.4
Plainfield	Maximum	39	31	32	53	45	32	34	46	50	39	39	39	39	50	49	47	45	38	27	40	27	41	55	51	30	25	40	38	51	....	....	40.4
	Minimum	13	19	10	25	32	11	13	34	35	31	28	23	16	22	35	33	36	30	11	18	13	8	36	30	18	4	14	22	20	....	....	22.1
Ridgefield	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Somerville	Maximum	40	37	34	54	47	34	35	46	48	43	36	38	41	46	50	44	45	40	32	42	32	42	56	49	36	28	45	38	54	....	....	41.8
	Minimum	10	17	9	21	33	13	13	34	35	33	28	21	16	24	32	32	33	32	12	18	15	8	34	36	19	6	17	22	26	....	...	22.4
South Orange	Maximum	42	38	33	54	47	....	35	48	49	41	39	39	35	46	49	46	47	42	33	40	35	41	57	54	42	26	44	39	52	....	....	42.6^{a}
	Minimum	15	17	10	25	....	11	14	32	34	31	22	21	16	16	32	33	32	31	10	16	12	10	34	38	18	4	11	23	22	....	....	21.1^{a}
Verona	Maximum	38	33	34	52	46	25	33	46	47	36	35	35	37	48	48	42	43	36	30	37	22	37	53	47	32	22	40	34	48	....	....	38.5
	Minimum	20	17	13	31	24	9	15	32	35	30	24	22	16	26	35	35	35	29	10	21	10	12	35	32	14	3	18	22	25	....	....	22.4
New York, N. Y.	Maximum	38	32	40	52	45	30	40	48	49	38	38	37	39	49	49	45	44	38	29	39	26	39	55	50	28	25	42	37	50	....	....	40.4
	Minimum	29	20	21	33	24	14	22	38	36	32	29	24	20	30	36	37	37	26	14	21	14	20	39	28	12	6	20	24	30	....	....	25.4
The Southern Interior.																																	
Belleplain	Maximum	....	38	40	53	50	38	41	53	49	39	40	42	42	54	54	48	48	41	38	48	35	45	61	55	41	27	47	42	55	....	....	45.1^{a}
	Minimum	9	....	8	28	35	14	16	35	35	30	23	19	15	24	36	40	31	33	17	24	13	8	38	39	20	7	12	14	18	....	...	22.9^{a}
Bridgeton	Maximum	39	36	39	50	48	35	36	50	48	43	42	38	40	53	48	52	48	46	38	45	35	44	58	50	40	26	47	42	53	....	....	43.8
	Minimum	16	14	12	29	35	18	20	34	37	33	26	28	19	27	38	36	34	33	17	27	18	16	40	40	22	11	20	23	23	....	....	25.7
Burlington	Maximum	39	37	36	50	48	40	35	44	46	42	39	38	36	51	53	45	44	43	34	42	36	44	58	56	36	26	47	44	53	....	...	42.8
	Minimum	10	21	12	35	37	18	19	33	38	33	28	27	19	27	36	35	33	34	15	25	13	14	37	36	22	9	24	25	22	....	....	25.4
Clayton	Maximum	38	33	....	52	45	34	35	47	46	....	38	39	42	51	53	46	47	41	34	45	34	42	59	49	34	25	46	44	54	....	....	42.7^{b}
	Minimum	16	13	14	30	34	16	19	34	37	28	26	25	19	28	37	36	31	32	16	25	19	16	39	34	21	10	18	26	25	....	....	25.0
Hightstown	Maximum	40	41	35	52	47	35	34	44	48	40	37	37	42	48	52	45	46	42	33	41	33	43	57	54	37	25	45	39	54	....	....	42.3
	Minimum	9	17	9	23	34	15	14	33	35	31	26	23	16	27	35	34	33	32	12	20	11	14	36	35	20	7	19	21	22	....	....	22.9
Imlaystown	Maximum	38	35	34	50	46	38	34	44	46	40	37	35	41	49	51	44	44	43	32	41	35	42	55	54	36	25	43	42	....	....	....	41.2^{a}
	Minimum	9	16	10	28	35	15	16	33	36	31	25	23	17	25	35	34	32	30	12	17	17	13	36	36	20	....	18	23	....	....	...	23.8^{b}
Indian Mills	Maximum	43	40	36	56	50	40	36	50	47	42	40	38	44	50	52	47	45	45	35	46	35	44	59	57	40	25	47	44	57	....	....	44.5
	Minimum	14	11	6	30	37	14	15	34	38	32	26	22	16	25	37	35	30	32	15	23	18	10	38	39	21	10	13	23	20	....	....	23.6
Lakewood	Maximum	40	38	35	55	50	32	37	51	48	39	37	38	37	48	51	46	45	41	33	42	34	40	56	49	36	25	45	40	56	....	....	42.2
	Minimum	13	16	9	32	32	17	12	34	39	32	26	21	17	22	35	34	29	32	13	18	16	11	36	36	20	7	14	23	17	....	....	22.9
Moorestown	Maximum	40	36	40	52	47	34	33	45	46	39	40	40	43	49	53	45	45	43	33	43	35	43	58	50	38	24	45	45	59	....	....	42.9
	Minimum	14	18	13	28	32	17	18	31	38	31	27	24	18	25	35	35	33	32	13	23	13	18	35	35	23	9	18	25	21	....	....	24.2
Pleasantville§§	Maximum	40	34	40	53	....	35	46	50	51	40	42	39	38	51	55	45	46	39	35	49	31	54	63	45	....	31	48	38	49	....	....	44.0^{b}
	Minimum	13	10	7	18	34	18	18	34	40	30	24	21	17	22	36	35	31	35	18	18	15	10	27	39	21	10	....	18	19	....	....	22.8^{a}
Riverton	Maximum	39	31	37	49	44	29	34	44	46	36	39	38	40	54	50	44	44	36	32	44	28	44	58	49	30	25	46	40	53	....	....	40.8
	Minimum	21	19	16	29	25	17	20	34	36	31	30	26	19	28	37	37	35	27	14	21	18	14	40	30	16	9	22	24	23	....	..	24.8
Runyon	Maximum	41	39	41	52	44	38	42	45	49	42	40	40	41	50	46	45	45	40	36	38	32	40	56	52	33	25	46	50	54	....	....	42.8
	Minimum	3	6	26	23	34	10	14	39	35	26	22	18	10	19	34	32	33	34	10	15	4	5	36	31	20	5	7	17	17	....	....	20.2
Trenton	Maximum	43	31	36	50	45	29	37	48	49	36	38	36	41	51	49	44	46	36	30	42	24	44	56	47	29	26	43	39	53	....	...	40.6
	Minimum	22	18	20	28	24	16	20	37	36	31	28	24	19	29	36	36	33	25	12	20	16	18	39	27	14	7	21	25	27	....	....	24.4
Tuckerton	Maximum	42	44	39	54	53	38	37	48	49	43	41	39	38	46	54	50	46	43	35	48	27	45	63	60	39	30	49	47	50	....	....	44.7
	Minimum	18	11	14	26	35	14	17	36	38	30	25	20	16	28	37	35	32	33	15	24	15	14	36	39	12	7	18	22	23	....	....	23.8
Vineland	Maximum	41	35	41	51	50	38	37	50	49	40	43	40	44	53	53	47	48	43	37	48	37	46	61	54	40	28	48	47	57	....	....	45.0
	Minimum	24	17	18	30	37	17	24	36	38	32	25	25	20	27	37	36	33	34	17	25	19	18	38	39	22	10	18	33	26	....	....	26.7
Philadelphia, Pa.	Maximum	39	34	39	52	47	32	38	49	48	38	40	38	40	54	50	46	47	39	32	44	29	44	59	50	30	27	48	41	53	....	....	42.3
	Minimum	27	24	24	32	29	20	26	38	37	34	31	27	24	32	36	40	38	27	15	24	19	23	41	30	18	11	23	29	31	....	....	27.9
The Sea Coast.																																	
Asbury Park	Maximum	41	32	39	56	51	28	38	49	49	37	36	37	34	50	50	45	44	38	31	44	25	40	57	50	31	26	45	37	44	....	....	40.8
	Minimum	26	19	20	36	20	20	20	37	36	33	28	24	23	32	37	36	35	26	14	21	18	21	40	29	22	8	20	26	30	....	....	26.1
Atlantic City	Maximum	37	34	45	52	50	30	46	48	50	37	42	40	37	50	54	45	47	41	37	48	31	43	62	48	32	28	47	36	47	....	....	42.9
	Minimum	29	20	23	38	29	21	30	41	36	30	30	25	22	37	39	38	37	31	18	24	19	27	41	32	20	11	27	28	33	....	....	28.8
Cape May City	Maximum	36	35	44	53	49	36	44	48	50	38	43	40	41	48	54	44	48	41	34	48	31	46	62	46	32	27	48	40	49	....	....	43.3
	Minimum	30	23	22	35	28	20	25	37	35	28	29	27	10	36	39	37	36	32	21	28	21	21	41	32	20	12	27	28	34	....	....	28.4
Long Branch	Maximum	43	33	45	55	39	27	35	50	45	35	38	36	38	47	50	42	43	35	23	38	22	40	56	39	26	23	42	33	53	....	....	39.0
	Minimum	14	14	20	30	24	14	17	34	33	29	23	22	24	28	35	32	31	23	7	21	10	14	36	26	14	6	14	22	27	....	....	22.2
Sandy Hook	Maximum	38	31	39	50	43	27	36	45	44	36	36	36	33	47	46	42	42	35	31	40	23	41	50	46	30	23	41	35	50	....	....	38.5
	Minimum	28	23	24	33	27	17	23	35	35	33	30	26	25	30	37	36	35	27	15	22	17	21	40	30	16	9	22	27	29	....	....	26.6

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	50	33	61	62	95	56	51	62	90	58	66	81	38	165	107	43	100	109	143	119	45	158	86	195	*	98	72	70	90	....	....	2,403
	Wind movement	*	*	*	*	*	*	*	†	*	*	*	*	.224	.230	.096	.032	.320	*	*	*	*	.102	.112	*	*	*	*	.384	.034	....	....	3.870
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...	....	....	....
	Wind movement	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	....	....	....	...	....	....	....	....	....	....	..	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † 2.336.

51.05
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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

G. HAROLD NOYES, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. MARCH, 1928. No. 3

GENERAL SUMMARY.

The weather during March exhibited much less of its turbulent characteristics than is ordinarily associated with the opening periods of Spring. There were no severe storms. Nearly all the snow occurred in the one disturbance on the 9th, and was melted during the next two days. As a general thing the month was slightly colder than normal, but there were two warm periods from the 8th to the 15th, and from the 23d to the 26th which were almost sufficient to counterbalance the intervening cold. Statewide averages disclosed that temperature, rain, snow and cloudiness were slightly below normal, and that frequency of clear days was slightly above normal. Two generous rains occurred on the 18th and 30th, but other rains were light, infrequent and unimportant. Thundershowers on three days were not unusual. On three consecutive days from the 24th to the 26th, temperatures were well up in the 70's in nearly all portions of the State.

Storm warnings were displayed along the coast on the 4th, 9th, 17th, 22d, 26th and 30th.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 42 stations, was 38.3°, which was 0.4° below normal. The highest temperature was 82° at Vineland on the 25th, and the lowest, 6° at Layton on the 11th. The greatest daily range of temperature was 50° at Runyon on the 24th. The highest monthly mean temperature was 42.1° at Vineland, and the lowest, 34.4° at Layton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +2.2°; Red Sandstone Plain, +1.5°; Southern Interior, +1.4°; Sea Coast, +1.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 2.84 inches, which was 1.08 inches below normal. The average total snowfall at twenty-two selected stations was 4.9 inches, which was 1.0 inch below normal.

The greatest monthly precipitation was 3.82 inches, at Chatham, and the least, 1.70 inches at Phillipsburg. The greatest amount of precipitation in any 24 consecutive hours was 1.61 inches at Sussex on the 29-30th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1928, to date, by sections, is: The Highlands, —1.68 inches; Red Sandstone Plain, —1.46 inches; Southern Interior, —2.65 inches; Sea Coast, —3.39 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was 2 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 58 miles per hour from the northeast at Atlantic City on the 18th. High winds also occurred on the 9th, 18th, 27th and 31st.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 14, which was 2 more than normal; partly cloudy, 8, or 1 less than normal; cloudy, 9, or 1 less than normal. The per cent of possible sunshine was 58, which was 3 per cent below normal.

MISCELLANEOUS.

The mean stage of the Delaware River at Phillipsburg was 4.3 feet, and the highest stage was 8.0 feet on the 30th and 31st. At Trenton the mean stage was 2.5 feet, which was 1.6 feet below normal. The highest stage was 4.3 feet on the 31st.

The mean atmospheric pressure, reduced to sea level, was 29.92 inches, which was 0.09 inch below normal. The highest reading was 30.52 inches at Riverton and Verona on the 6th, and the lowest, 29.22 at Sandy Hook on the 27th.

Dense fog was observed on the 12th, 13th, 14th and 26th. Thunderstorms occurred on the 22d, 29th and 30th. Solar halos were reported on the 16th and 28th and lunar halos on the 27th and 28th. Sleet fell on the 9th, 11th, 16th, 17th, 18th, 22d and 30th.

COMPARATIVE DATA FOR MARCH

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	*30.4*	66	2	*1.10*	2.29	*0.23*	.....	.....	.....	.....	.....
1886	37.7	70	9	3.70	5.27	2.59	.....	.....	.....	.....	.....
1887	37.7	*61*	8	3.34	5.45	2.19	.....	.....	.....	13	10
1888	32.8	72	0	5.71	8.22	3.75	.....	.....	.....	12	11
1889	40.5	67	**19**	3.79	6.49	1.98	.....	.....	.....	13	8
1890	37.6	78	0	6.08	7.92	4.14	.....	.....	.....	13	14
1891	37.2	68	4	5.06	8.02	2.05	.....	8	10	13	12
1892	34.4	64	6	4.75	7.21	3.11	.....	10	12	9	9
1893	37.0	68	6	3.73	6.26	2.36	.....	10	10	11	10
1894	44.2	83	12	1.77	2.65	1.09	.....	12	11	8	10
1895	36.7	72	7	3.16	4.66	1.77	4.0	12	8	11	10
1896	34.0	69	−8	5.34	7.38	3.14	13.2	13	8	10	11
1897	40.0	77	18	2.78	4.32	1.55	1.6	11	9	11	10
1898	45.1	77	16	3.33	4.25	2.56	3.0	9	10	12	12
1899	38.6	73	13	6.54	9.58	3.45	5.4	7	10	14	13
1900	35.6	67	−9	3.51	4.96	2.48	7.0	12	12	7	10
1901	39.2	75	−8	4.64	8.07	2.40	0.9	9	10	12	12
1902	43.9	77	0	4.34	7.20	3.16	5.7	12	10	9	11
1903	47.6	79	13	5.13	8.53	3.60	*0*	11	8	12	10
1904	37.2	72	1	3.43	4.76	2.02	4.5	11	8	12	13
1905	39.8	87	−7	3.95	5.06	2.80	2.6	14	8	9	12
1906	34.4	62	*−15*	5.09	6.77	2.91	11.2	10	9	12	11
1907	41.2	88	−11	3.04	4.38	1.81	11.5	13	10	8	10
1908	41.8	89	7	2.80	4.92	1.06	3.5	11	9	11	12
1909	38.3	74	−6	3.48	4.66	2.31	4.6	12	10	9	13
1910	44.5	88	10	1.22	2.36	0.29	1.1	14	10	7	6
1911	37.6	76	3	3.38	4.50	2.64	5.3	10	12	9	11
1912	36.9	72	3	**7.61**	**9.61**	**5.95**	6.6	9	11	11	14
1913	44.8	79	1	5.15	7.73	2.47	0.1	10	9	12	12
1914	35.4	75	−6	3.65	6.45	2.02	**20.5**	13	10	8	10
1915	36.1	63	11	1.13	*1.65*	0.58	7.4	20	7	4	3
1916	31.7	71	−7	3.48	4.96	2.38	19.3	13	8	10	12
1917	38.2	72	0	4.65	7.14	2.28	9.8	12	8	11	13
1918	41.8	82	8	2.06	3.76	0.99	0.7	17	7	7	9
1919	43.2	77	12	5.32	7.40	3.77	1.6	14	7	10	13
1920	39.4	79	−8	3.80	5.36	2.29	5.6	17	5	9	10
1921	**49.1**	**92**	11	3.03	4.65	1.80	T.	14	10	7	11
1922	41.1	82	2	4.52	7.10	3.42	3.7	12	6	13	13
1923	38.0	81	−3	4.09	6.73	2.13	6.3	17	6	8	10
1924	38.8	76	5	2.51	5.69	0.80	2.7	16	6	9	8
1925	43.3	80	1	3.47	6.09	1.50	0.3	16	6	9	9
1926	35.1	79	0	2.25	3.15	1.52	0.4	16	9	6	7
1927	41.9	81	9	1.46	2.73	0.78	0.3	14	7	10	10
1928	38.3	82	6	2.84	3.82	1.70	4.9	14	8	9	10

W. B. O. Philadelphia-4-24-28-810.

Climatological Data for March, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	37.8	−0.3	75	26	14	4	43	3.19	−0.66	1.45	7.8	9	20	3	8	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	35.8	0.0	70	24	9	4†	48	2.97	−1.23	......	10.7	10	1	6	24	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	8	4	....	3.26	−0.21	1.55	14.3	9	12	10	9	e.	Brice E. Riker.
Dover	Morris	600	44	35.2	0.0	69	24†	10	4	44	3.23	−0.76	1.29	11.5	11	6	16	9	......	William C. Harris.
Layton	Sussex	480	27	34.4	−1.2	72	26	6	11	45	3.59	+0.22	1.57	14.5	7	13	3	15	nw.	A. M. Depue.
Newton	Sussex	769	44	35.3	−0.2	71	26	12	4	39	3.11	−0.46	1.57	8.0	10	14	8	9	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	37.6	−0.5	75	26	10	6	41	1.70	−1.84	0.72	7.5	7	19	7	5	......	Town Engineer.
Sussex	Sussex	442	33	35.6	−0.7	73	26	7	11	42	2.76	−0.83	1.61	7.8	8	17	4	10	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	36.0	−0.4	75	26	6	11	48	2.98	−0.72	1.61	10.3	9	13	7	11	nw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	37.4^{j}	−2.1	70	26	......	......	....	§	....	1.05	......	....	....	..	....	w.	William Mann.
Boonton	Morris	400	§38	35.8	−0.8	68	26	9	4	43	2.61	−1.33	1.28	......	9	16	0	15	nw.	John Kline.
Chatham	Morris	185	24	......	......	....	......	......	......	....	3.82	+0.08	0.87	7.0	14	20	6	5	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	40.4^{b}	+1.6	74	24	14	4	39	2.82	−1.40	1.20	4.3	11	16	9	6	nw.	Union County Park Com
Flemington	Hunterdon	140	§42	39.4	−0.7	77	26	16	4†	46	2.77	−1.12	1.18	7.5	13	18	6	7	nw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	37.6	+0.6	68	25	15	4†	38	2.78	−1.40	1.28	9.5	9	10	8	13	nw.	Charles J. Bates.
Jersey City	Hudson	10	30	38.9	−0.3	72	24	17	6	33	2.65	−1.50	0.96	5.2	11	10	12	9	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	37.2	−2.2	74	26	14	6	36	2.96	−1.07	1.04	8.2	10	16	8	7	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	37.0	−1.0	70	25	14	6	42	3.47	−0.12	1.46	9.0	11	13	9	9	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	75	39.5	+0.7	70	24†	16	6	42	§	....	0.84	3.3	10	17	7	7	w.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	......	....	2.71	....	1.25	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	38.6	−0.2	69	24†	17	6	39	3.38	−1.00	1.32	10.5	11	23	2	6	nw.	Marion T. Probert.
Plainfield	Union	120	40	37.2	−1.6	72	25	15	4†	42	2.94	−1.33	1.17	7.4	12	10	13	8	nw.	E. D. Pearson.
Ridgefield	Bergen	80	11	37.0	....	70	24†	16	4	37	2.81	......	1.21	7.0	10	10	11	10	nw.	George P. Kirsten.
Somerville	Somerset	70	45	37.8^{b}	−0.4	72	26	12	4	32	2.31	−1.65	1.12	5.0	11	19	2	10	w.	H. B. TenEyck.
South Orange	Essex	200	58	38.7^{a}	+1.6	71	24†	13	4†	44	2 27	−1.59	0.79	5.6	12	12	9	10	w.	Everett W. Bird.
Verona	Essex	490	2	36.3	....	68	25	14	6	32	3.37	....	1.16	9.8	14	13	8	10	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	......	....	3.47	....	1.21	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	38.3	+0.6	69	25	17	6	29	2.54	−1.10	1.01	4.5	11	7	14	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	37.9	−0.4	77	26	9	4	46	2.95	−1.12	1.46	7.1	11	15	7	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	39.8^{j}	−1.3	77	24	8	4	43	§	....	......	0.7	10	....	....	.. .	......	Thomas J. Durell.
Bridgeton	Cumberland	90	47	41.2	−1.1	78	25	16	4	42	2.80	−1.38	0.98	T.	11	16	7	8	nw.	Paul T. Kornman.
Burlington	Burlington	12	§42	40.8	+0.4	78	26	17	4	34	2.51	−1.20	0.72	1.6	11	15	6	10	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	40.2	−1.5	77	25	17	4	41	3.36	−0.22	1.03	0.1	12	6	18	7	nw.	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	....	......	......	....	....	....	...	......	
Hightstown	Mercer	120	34	39.0	−1.4	74	25†	15	6	47	2.91	−1.13	1.05	3.2	10	16	7	8	nw.	Charles Welsh.
Imlaystown	Monmouth	115	37	37.6^{k}	−1.5	75	26	15	4	....	§	....	......	......	12	....	...	....	......	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	40.0	−0.5	80	24	12	4	45	3.05	−0.98	0.77	0.8	10	13	7	11	nw.	James M. Armstrong.
Lakewood	Ocean	54	24	38.6	−1.0	76	24	12	4	47	3.19	−0.79	0.95	T.	12	11	7	13	nw.	R. W. Holman.
Moorestown	Burlington	75	65	39.8	+0.6	77	26	15	6	33	2.45	−1.31	0.67	1.5	9	13	11	7	nw.	John B. Warrick.
Northfield‡‡	Atlantic	25	21	......	......	......	......	... ..	......	....	2.45	−1.04	0.66	0.2	9	...	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	38.4	....	72	25	9	6	32	2.87	−0.60	0.66	......	9	17	7	7	nw.	N. J. Dept. Conservation.
Riverton	Burlington	......	2	39.9	......	77	24†	18	4†	43	2.56	....	0.83	2.4	9	15	6	10	nw.	Japanese Beetle Laboratory
Runyon‡‡	Middlesex	18	4	37.0	......	74	25	7	4	50	2.82	....	0.91	......	8	19	8	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	39.0	−0.1	77	26	18	6	35	2.19	−1.85	0.81	4.1	10	9	11	11	nw	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	39.8	−0.2	70	25	15	4†	29	2.46	−1.79	0.68	T.	11	17	4	10	w.	John H. Brown.
Vineland	Cumberland	109	59	42.1	+1.6	82	25	17	6	44	2.86	−1.10	1.01	......	6	12	11	8	nw	H. C. Himes
Philadelphia, Pa.	......	117	57	42.0	+1.2	75	26	22	6	33	2.10	−1.29	0.75	2.8	8	7	14	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	...	39.5	−0.5	82	25	7	4	50	2.75	−1.12	1.05	1.2	10	14	8	9	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	38.3^{a}	−0.7	67	25	18	6	....	2.61	−1.62	0.90	T.	11	18	9	4	nw	Information Bureau.
Atlantic City	Atlantic	16	55	40.0	+1.4	60	25	20	6	22	2.48	−1.12	0.67	0.2	10	12	11	8	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	40.9	+0.1	65	25	19	4	24	2.22	−1.51	0.61	T.	12	13	8	10	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	37.1	−1.4	73	25	14	6	38	3.08	−1.26	0.79	1.0	12	9	11	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	30	38.3	+1.3	68	25	20	6	29	2.44	−1.80	0.84	1.5	11	9	11	11	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	38.9	+0.1	73	25	14	6	38	2.57	−1.46	0.90	0.5	11	12	10	9	nw.	
For the State	......	......	....	38.3	−0.4	82	25	6	11	50	2.84	−1.08	1.61	4.9	10	14	8	9	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for March, 1928

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.10	....	T	....	T.	....	....	....	.53	.10	....	.24	....	....	....	T	.06	.66	....	....	....	.05	....	....	....	....	....	....	....	1.45	....	3.19
Charlotteburg	Passaic	.29	T.	.01	....	T.	....	T.	....	.50	.24	....	.14	....	.04	....	....	....	.43	....	....	....	.12	....	....	....	....	....	....	*	1.20	....	2.97
Culvers Lake	Delaware	.02	T.	T.	....	T.	....	T	....	.50	.22	....	.03	....	.04	....	....	T	.85	....	T.	....	.05	T	....	....	....	T.	....	....	1.55	....	3.26
Dover	Passaic	.10	....	....	....	....	....	....	....	.90	.10	*	.15	....	.15	....	.01	....	.46	....	....	....	.07	....	....	....	....	....	....	*	1.29	....	3.23
Layton	Delaware	....	....	.01	....	T.	....	T.	....	*	1.13	....	*	*	....	....	....	....	.75	....	....	....	.13	....	....	....	....	....	....	....	1.57	....	3.59
Newton	Delaware	.04	T.	T	....	T.	....	....	....	.42	.16	....	.04	....	.06	....	....	T.	.70	....	....	....	.06	....	....	....	....	....	....	....	1.57	.06	3.11
Phillipsburg	...do	T.	T.	T	T.	....	....	....	....	.66	T	.09	T	T.	T.	....	.03	T	.18	....	....	....	.02	....	T.	T.	....	....	....	.04	.68	....	1.70
Sussex	Hudson	....	....	....	....	....	....	T	....	.46	....	....	.05	....	.10	....	....	....	.40	....	....	....	.12	....	....	....	....	.02	....	....	1.61	....	2.76
The Red Sandstone Plain.																																	
Bayonne	Coast	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton ‖‖	Passaic	.08	....	T.	....	....	....	....	....	....	.52	....	.27	....	.07	....	....	T.	.20	.16	....	....	....	.03	....	....	....	T	....	....	.98	.30	2.61
Chatham ‖	....do	.17	....	.09	....	....	....	....	T.	....	.87	....	.30	....	.28	.09	....	.07	.19	.23	....	....	....	.39	....	.05	....	.03	....	....	.22	.84	3.82
Elizabeth	Coast	.20	T	....	....	....	....	T.	....	.05	.47	T.	.20	....	.02	....	T.	.01	.50	....	....	....	.07	T.	....	....	....	....	....	....	1.20	.10	2.82
Flemington	Raritan	.20	T.	....	....	....	....	....	....	.38	.16	.02	.24	....	.04	....	T	.07	.39	....	....	....	.05	....	....	....	....	.02	....	T.	1.18	.02	2.77
Highwood	Hackensack	.22	T	T.	....	....	....	T.	....	.67	.19	....	.06	....	.10	....	T.	....	.13	....	T.	....	.08	....	....	....	....	....	....	....	1.28	.05	2.78
Jersey City	Coast	.14	T	T.	....	....	....	T.	....	.56	.05	.06	.07	..	.04	....	.01	T	.62	....	....	....	.10	....	....	T.	....	T.	....	.04	.96	T	2.65
Lambertville	Delaware	.16	T.	....	....	....	....	....	....	.84	.17	*	.18	....	*	....	T.	.09	.41	....	....	....	.04	....	....	....	....	T.	....	.03	1.04	....	2.96
Little Falls ‖‖	Passaic	.14	....	T	....	....	....	....	....	....	.87	....	.22	....	.08	....	....	.01	.52	.08	....	....	....	.08	....	....	....	.01	....	....	1.18	.28	3.47
New Brunswick	Raritan	.12	T.	....	....	....	....	....	....	.14	.11	....	§	....	§	....	....	.01	.41	....	....	....	.09	....	....	....	....	....	....	....	.84	....	§
New Milford.**	Hackensack	.16	....	....	....	....	....	....	....	.46	....	.09	.06	....	.12	....	....	....	.46	....	....	....	.11	....	....	....	....	....	....	.14	1.11	....	2.71
Paterson	Passaic	.14	T.	.01	....	....	....	T.	....	.73	.22	T.	.20	....	.02	....	T.	....	.62	....	....	....	.10	....	....	....	....	.02	....	*	1.32	T.	3.38
Plainfield	Raritan	.15	T.	....	....	....	....	....	....	.70	.04	.06	.07	....	.06	....	.02	....	.61	....	....	....	.05	....	....	....	....	.01	....	T.	1.17	T.	2.94
Ridgefield	Hackensack	.21	T.	T	....	....	....	....	....	*	.57	.15	....	....	.06	....	T.	T	.45	....	....	....	.15	....	.01	T.	....	T.	....	*	1.21	T.	2.81
Somerville	Raritan	.21	T	T.	....	....	....	....	....	.23	*	*	.14	....	.05	....	....	.06	.42	....	....	....	.08	....	....	....	....	T.	....	....	1.12	....	2.31
South Orange	Rahway	.13	.03	....	....	....	....	T.	....	.43	.09	....	.16	....	.05	....	*	.03	.49	....	....	....	.07	....	....	....	....	....	....	....	.79	T.	2.27
Verona**	Passaic	.19	.01	....	....	....	....	T.	....	.87	.02	.19	.05	.12	....	....	.03	.01	.61	....	....	....	.10	....	....	....	.01	....	....	.07	1.09	....	3.37
Woodcliff Lake**	Hackensack	.17	....	....	....	....	....	....	....	.72	....	.12	.15	....	.23	....	....	....	.67	....	....	....	.15	....	....	....	....	.05	....	.15	1.06	....	3.47
New York, N. Y***	Coast	.13	T.	T.	....	....	....	T.	....	.57	....	.11	.02	.01	.03	....	.01	T	.56	....	....	....	.09	....	....	T.	....	T.	....	.12	.89	T.	2.54
The Southern Interior.																																	
Belleplain	Tuckahoe	.06	....	....	....	....	....	....	....	§	§	§	§	....	....	....	*	1.03	.02	....	....	....	.07	....	....	....	....	....	....	....	§	T.	§
Bridgeton	Coast	.12	....	T.	....	....	....	....	....	.98	.01	.09	.14	....	.08	....	.22	.04	.71	....	....	....	.03	....	....	....	....	....	....	....	.38	....	2.80
Burlington	Delaware	.13	....	....	....	....	....	....	....	.61	.08	.02	.20	....	....	....	.04	.07	.52	....	....	....	.08	....	....	....	....	....	....	....	.72	.04	2.51
Clayton	Delaware	.15	....	.01	....	....	....	....	....	.98	.05	.16	.23	....	.10	....	.35	....	.73	.03	....	....	.04	....	....	....	....	....	....	....	.53	T.	3.36
Hammonton	Mullica	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Raritan	.13	....	....	....	....	....	....	....	*	.71	T.	.20	..	T	....	*	.17	.54	....	....	....	.11	....	....	T	....	....	....	....	1.05	....	2.91
Imlaystown	Delaware	.06	.02	....	....	....	....	....	....	.05	§	.02	.29	....	.04	....	.03	.03	.31	....	....	....	§	....	....	....	....	....	....	....	§	....	§
Indian Mills	Mullica	.18	....	.09	....	....	....	....	....	.66	.16	T.	.25	.11	....	....	.25	....	.77	....	....	....	.07	....	....	....	....	....	....	....	.51	....	3.05
Lakewood	Metedeconk	.10	....	T.	....	....	....	....	....	.80	.13	.06	.23	....	.02	....	.03	T.	.65	....	....	....	.18	....	....	....	....	T.	....	T.	.95	.04	3.19
Moorestown	Delaware	.10	....	T	....	....	....	....	....	.67	....	.09	.25	....	....	....	.10	.05	.56	T.	....	....	.03	....	....	....	....	....	....	....	.60	....	2.45
Northfield	Coast	....	....	T.	....	....	....	....	....	.66	T	.10	.22	....	.21	....	.23	.03	.62	....	....	....	.02	....	....	....	....	....	....	....	.36	....	2.45
Pleasantville ‖‖	Coast	.05	T.	T.	....	....	....	....	....	....	.65	....	.36	....	.28	....	T.	.33	.66	.03	....	....	....	.06	....	....	....	....	....	....	.02	.43	2.87
Riverton ‖‖	Delaware	.12	....	.02	....	....	....	....	....	T.	.83	....	.25	T.	T	....	T.	.09	.53	T.	....	....	....	.04	....	....	....	....	....	....	.55	.13	2.56
Runyon	Coast	.17	....	....	....	....	....	....	....	.72	....	....	.24	....	....	....	....	....	.64	....	....	....	.14	....	....	....	....	....	....	....	.91	....	2.82
Trenton***	Delaware	.15	T	....	....	....	....	....	....	.46	T	.12	.05	....	.02	....	.03	....	.47	T.	....	....	.07	....	....	T.	....	T.	....	.21	.61	....	2.19
Tuckerton	Coast	.03	....	T	....	....	....	....	....	.58	.05	.14	.20	....	.16	....	.13	.08	.68	....	....	....	.05	....	....	....	....	....	....	....	.22	.13	2.46
Vineland	Maurice	....	....	....	....	....	....	....	....	1.01	....	.18	.15	....	....	....	.24	....	.85	....	....	....	....	....	....	....	....	....	....	....	.43	....	2.86
Phila., Pa***	Delaware	.09	....	.02	....	....	....	....	....	.75	....	.12	.04	T.	T.	....	.09	....	.47	....	....	....	T.	....	....	....	....	T	....	T.	.52	....	2.10
The Sea Coast.																																	
Asbury Park	Coast	.05	T	....	....	....	....	....	....	.40	.05	.20	.10	....	.01	....	.05	....	.70	....	....	....	.15	....	....	....	....	....	....	.10	.80	....	2.61
Atlantic City***	....do	.01	....	.01	....	....	....	....	....	.46	....	.26	.06	....	.31	....	.33	T.	.67	....	T.	T.	.02	....	....	....	....	....	....	....	.35	....	2.48
Cape May City	....do	.01	....	....	....	....	....	....	....	.53	.02	.15	.07	T.	....	....	.42	.03	.61	T.	....	....	.02	....	....	.01	.01	....	....	....	.34	....	2.22
Long Branch	....do	.06	T.	....	....	....	....	T.	....	.59	.07	.09	.06	T.	.13	....	.05	....	.76	....	....	....	.12	....	....	....	....	.01	....	.35	.79	....	3.08
Sandy Hook***	....do	.12	T.	....	....	....	....	T.	....	.52	T.	.15	.05	T.	.04	....	.01	.01	.51	....	....	....	.18	....	....	T.	....	T.	....	.16	.69	....	2.44

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.93	30.51	6	29.26	18	17.0	58	ne.	18	77	70	74	57
New York, N. Y	29.92	30.49	6	29.25	27	17.4	53	nw.	31	63	55	55	64
Philadelphia, Pa	29.94	30.52	6	29.25	27	11.2	42	ne.	18	72	62	62	62
Ridgefield	29.92	30.50	6	29.25	27	......	......	......	......	......	......	......	......
Riverton	......	30.52	6	......	......	......	......	......	......	76	57	64	......
Sandy Hook	29.90	30.51	6	29.22	27	15.8	44	w.	27	70	61	67	59
Trenton	29.92	30.50	6	29.24	27	11.4	40	nw.	27	76	62	64	59
Verona	......	30.52	6	29.24	27	7.8	26	w.	27	67	52	57	......
Long Branch	......	......	......	29.24	27	......	......	......	..	70	55	58	......

Daily Temperatures for March, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	42	38	35	43	38	39	42	49	40	43	40	51	60	55	47	41	51	45	39	49	48	43	53	69	66	75	66	50	47	43	42	48.0
	Minimum	30	22	24	14	16	15	17	23	25	26	16	33	26	41	31	31	29	30	28	23	28	30	35	26	43	41	35	24	28	33	28	27.5
Charlotteburg	Maximum	48	37	36	39	39	38	42	43	41	36	38	55	55	51	44	39	51	49	36	39	38	43	46	70	69	68	64	48	47	40	42	46.2
	Minimum	30	20	22	9	15	12	9	22	20	22	15	31	22	39	29	28	28	29	26	25	29	33	32	22	44	36	32	22	27	31	25	25.4
Dover	Maximum	43	38	34	40	34	34	41	44	30	39	34	56	56	51	45	35	48	41	38	43	45	42	48	69	67	69	57	48	44	37	40	44.8
	Minimum	23	22	18	10	15	14	14	22	23	21	12	32	26	35	32	28	29	29	27	25	28	32	34	25	47	39	29	22	24	32	26	25.6
Layton	Maximum	42	38	32	40	36	30	41	41	30	36	35	57	58	49	44	37	50	39	37	40	43	41	45	69	68	72	63	48	40	39	41	44.5
	Minimum	26	20	19	9	14	10	9	21	21	24	6	32	23	37	30	29	29	29	26	24	28	28	31	24	35	34	30	21	29	31	25	24.3
Newton	Maximum	45	37	34	41	35	32	41	42	32	38	36	53	52	51	42	38	46	38	36	39	43	41	42	67	69	71	63	47	42	39	40	44.3
	Minimum	27	22	20	12	14	13	14	21	22	22	14	32	32	39	32	28	28	28	25	24	28	31	32	28	50	41	29	22	29	31	24	26.3
Phillipsburg	Maximum	45	43	36	41	35	36	43	44	33	39	38	50	57	53	46	37	47	39	41	44	47	46	52	70	68	75	59	50	49	40	43	46.6
	Minimum	28	26	22	18	24	10	11	25	27	24	17	35	31	39	33	31	31	33	29	27	29	33	34	29	46	40	31	27	30	35	30	28.5
Sussex	Maximum	47	39	35	41	39	31	41	42	36	41	39	55	59	48	43	37	47	42	38	40	42	42	46	67	69	73	66	48	47	40	41	45.8
	Minimum	17	22	21	12	15	11	12	22	22	24	7	32	26	40	30	29	29	30	26	25	30	31	32	25	37	35	33	22	29	31	26	25.3
The Red Sandstone Plain.																																	
Bayonne	Maximum	38	36	....	36	34	35	46	....	39	38	39	...	....	56	53	46	....	40	42	40	42	44	52	....	....	70	....	54	47	40	....	44.0[i]
	Minimum	28	26	....	....	20	20	....	26	....	28	28	....	28	44	....	34	30	28	32	....	34	34	38	34	....	....	40	....	36	30	26	30.7[j]
Boonton§§	Maximum	43	39	31	42	33	36	45	45	32	42	38	55	57	56	46	38	49	38	40	43	45	44	49	67	67	68	55	49	47	41	43	45.9
	Minimum	25	20	24	9	17	15	14	20	21	25	14	23	24	30	29	30	29	30	29	28	29	26	34	24	34	39	44	25	25	32	28	25.7
Elizabeth	Maximum	....	41	37	42	41	36	48	47	45	....	....	54	56	56	53	45	49	....	41	47	47	48	53	74	72	69	60	53	51	44	45	50.1[d]
	Minimum	32	23	28	14	19	....	20	25	28	27	25	35	30	43	30	31	31	32	29	27	30	35	38	35	49	44	38	24	33	34	30	30.6[a]
Flemington	Maximum	47	40	39	42	40	42	45	50	46	40	38	55	59	56	54	40	51	46	42	48	49	44	55	73	73	77	67	54	47	43	46	49.9
	Minimum	33	24	28	16	18	16	19	25	26	27	17	33	27	41	30	29	30	31	28	27	28	30	36	27	50	42	38	25	29	34	28	28.8
Highwood	Maximum	43	39	35	38	39	33	45	46	42	36	38	54	55	51	48	41	48	49	40	44	45	45	50	66	68	64	60	49	50	42	42	46.6
	Minimum	32	24	25	15	20	15	18	26	25	25	15	34	27	32	31	30	30	33	30	28	27	29	36	28	48	43	38	26	31	34	27	28.5
Jersey City	Maximum	44	39	36	40	35	35	47	44	37	40	39	54	53	54	46	38	49	39	40	44	46	45	52	72	71	64	59	50	45	42	41	46.5
	Minimum	31	26	24	20	20	17	26	27	29	26	30	35	39	40	33	31	31	32	30	29	32	34	36	39	54	43	34	27	33	33	29	31.3
Lambertville	Maximum	47	37	36	40	37	35	45	43	35	36	38	50	53	52	45	39	46	41	38	41	45	45	52	69	70	74	63	50	45	47	42	46.3
	Minimum	31	25	25	15	18	14	19	24	26	27	20	33	33	41	31	30	29	30	28	26	28	30	36	33	....	44	35	25	30	33	28	28.2[a]
Little Falls§§	Maximum	39	35	33	38	32	32	44	43	31	45	42	58	56	53	45	37	51	37	40	43	45	45	50	69	70	66	48	50	48	35	43	45.3
	Minimum	31	26	26	15	19	14	17	25	25	25	19	31	26	38	33	30	30	31	30	28	30	33	35	27	45	43	44	26	29	33	29	28.8
New Brunswick	Maximum	51	39	39	42	41	37	49	46	46	43	39	53	56	55	54	46	48	47	42	45	46	46	51	70	70	70	65	51	50	43	44	49.2
	Minimum	33	24	29	17	20	16	22	25	29	28	23	33	28	40	32	30	30	32	29	30	27	31	37	28	54	40	37	27	31	34	29	29.8
Paterson	Maximum	44	39	35	41	35	36	46	45	38	39	37	56	55	53	49	43	50	47	38	42	45	43	51	69	69	66	55	50	45	41	42	46.6
	Minimum	31	27	25	18	21	17	21	28	28	27	20	34	31	42	32	32	31	32	31	29	31	32	37	30	53	44	38	27	33	34	29	30.5
Plainfield	Maximum	43	39	36	41	35	34	47	44	35	40	39	53	52	54	46	38	50	37	40	44	45	44	51	70	72	65	57	50	45	41	41	46.1
	Minimum	30	26	24	15	18	15	17	25	26	24	19	34	28	38	31	29	31	31	29	27	29	33	35	28	45	38	34	25	33	33	27	28.3
Ridgefield	Maximum	43	37	35	39	32	33	47	46	31	40	36	56	55	53	45	38	50	36	41	44	46	46	52	70	70	62	51	49	43	39	43	45.4
	Minimum	33	23	18	16	19	15	20	26	27	23	19	32	28	36	31	29	30	32	30	28	29	31	34	33	52	42	28	26	30	33	29	28.5
Somerville	Maximum	45	40	....	44	46	38	46	47	40	41	37	53	58	55	48	42	50	46	42	46	49	42	47	....	....	72	62	51	48	41	44	47.1[c]
	Minimum	33	21	28	12	19	16	15	25	24	29	18	34	26	42	29	30	31	32	29	27	25	29	37	25	48	42	37	25	28	34	30	28.4
South Orange	Maximum	45	40	37	43	43	36	48	47	45	40	39	...	55	56	52	46	50	46	43	46	48	46	53	71	71	64	64	52	51	45	45	48.9[a]
	Minimum	32	21	27	13	19	13	19	24	25	26	19	33	29	42	27	30	31	32	28	28	28	....	36	27	49	44	38	24	29	34	29	28.5[a]
Verona	Maximum	44	36	32	39	34	32	44	42	34	36	35	51	54	52	53	35	46	40	37	41	42	43	47	67	68	63	53	47	42	39	40	44.1
	Minimum	27	24	20	15	17	14	20	24	26	24	25	32	35	38	32	29	29	30	30	28	27	29	32	35	56	42	32	31	24	31	27	28.5
New York, N. Y.	Maximum	43	38	35	38	34	34	46	44	38	39	39	54	51	54	45	38	48	39	39	43	44	44	50	68	69	60	56	49	45	41	41	45.4
	Minimum	30	26	21	20	20	17	27	27	29	26	31	35	40	40	34	31	30	32	30	24	32	34	37	39	55	43	31	27	33	33	29	31.2
The Southern Interior.																																	
Belleplain	Maximum	47	42	40	43	39	38	51	49	....	....	....	....	....	....	....	....	....	39	42	44	....	54	57	77	75	75	70	52	51	57	47	51.9[j]
	Minimum	33	23	19	8	25	10	24	25	....	....	....	....	....	....	....	....	....	21	29	27	25	....	30	34	53	44	40	22	26	34	31	27.8[j]
Bridgeton	Maximum	51	42	41	41	38	37	52	50	46	40	42	54	60	57	52	48	44	44	42	46	46	50	57	76	78	72	67	51	53	53	47	50.9
	Minimum	33	27	30	16	25	19	22	27	27	32	27	39	33	47	30	30	31	33	30	30	28	33	34	34	51	47	41	26	30	35	31	31.5
Burlington	Maximum	51	40	40	42	40	37	48	48	45	38	40	56	56	54	52	47	46	46	40	43	46	47	55	70	72	78	73	52	48	45	45	49.7
	Minimum	35	26	32	17	22	18	21	28	29	30	28	33	32	46	32	33	31	30	31	31	31	32	38	39	51	45	39	30	34	33	31	31.9
Clayton	Maximum	48	40	38	42	37	36	50	46	39	40	40	52	59	55	50	39	46	39	40	45	46	48	55	76	77	75	61	51	53	46	46	48.9
	Minimum	34	27	29	17	24	19	23	27	28	30	28	34	32	44	29	31	31	33	30	30	28	33	36	35	53	47	38	28	31	35	31	31.5
Hightstown	Maximum	50	38	37	44	42	37	48	....	42	38	39	54	58	55	50	42	49	47	41	45	46	47	54	73	74	74	66	52	48	40	44	49.1[a]
	Minimum	32	25	28	17	19	15	18	25	24	28	19	33	28	44	32	32	28	26	29	28	24	29	36	26	53	41	37	27	28	33	29	28.8
Imlaystown	Maximum	52	39	....	42	39	35	48	45	44	....	....	54	57	54	49	45	48	48	41	...	...	....	....	....	....	75	....	52	49	....	44	48.0[k]
	Minimum	....	25	....	15	20	16	17	26	24	....	21	33	29	44	31	29	30	32	29	....	....	....	....	....	....	....	38	26	29	....	29	27.2[k]
Indian Mills	Maximum	52	42	40	44	38	36	50	49	43	38	40	55	52	57	51	46	47	44	42	45	46	51	54	80	76	79	70	52	50	45	45	50.3
	Minimum	33	18	29	12	23	14	17	27	23	30	25	35	31	45	29	30	31	34	29	28	24	30	38	35	51	46	40	21	30	35	30	29.8
Lakewood	Maximum	48	39	38	39	38	35	49	46	39	37	40	54	52	56	49	43	44	40	40	43	46	54	53	76	74	69	66	51	48	41	44	48.1
	Minimum	32	22	29	12	20	15	15	26	24	28	23	35	31	41	28	30	31	34	29	28	26	27	37	29	50	43	40	27	30	34	29	29.2
Moorestown	Maximum	49	42	40	42	39	39	49	48	40	41	40	55	61	55	51	45	49	43	43	44	49	48	56	71	75	77	65	52	48	43	46	49.8
	Minimum	33	22	27	16	22	15	20	26	27	28	24	33	31	44	30	30	29	32	29	29	29	30	37	31	50	44	38	27	32	33	29	29.9
Pleasantville§§	Maximum	45	42	40	40	37	38	46	46	46	39	45	55	51	59	51	34	42	39	44	46	46	55	57	63	72	66	57	51	49	51	51	48.5
	Minimum	33	20	30	10	19	9	15	19	22	23	28	37	33	37	27	31	30	32	29	27	26	26	33	31	44	43	46	21	27	36	31	28.2
Riverton	Maximum	43	40	38	42	38	36	49	45	35	37	40	55	57	54	50	36	46	38	42	44	46	50	55	77	75	77	61	53	49	43	46	48.3
	Minimum	31	27	23	18	22	18	22	28	31	29	25	35	33	39	32	31	31	32	31	31	32	33	38	34	57	49	34	29	35	36	32	31.5
Runyon	Maximum	46	40	40	42	37	37	52	42	36	42	39	....	52	57	47	48	47	45	45	45	49	48	54	72	74	70	54	52	50	41	45	48.3[a]
	Minimum	32	17	12	7	12	10	10	28	30	20	17	33	28	27	30	26	27	27	29	29	25	27	36	22	46	37	37	25	27	33	29	25.6
Trenton	Maximum	43	40	38	42	38	37	48	46	35	40	40	53	56	53	47	40	49	37	40	42	46	48	52	72	71	77	58	50	45	41	43	47.3
	Minimum	30	27	23	20	20	18	25	26	31	28	27	34	32	38	34	31	30	31	30	29	29	33	38	37	55	44	32	28	33	33	30	30.8
Tuckerton	Maximum	46	44	42	41	40	38	46	48	49	39	41	55	56	58	58	51	46	39	44	46	46	55	58	63	70	61	55	53	53	48	47	49.5
	Minimum	33	21	29	15	22	15	18	26	25	29	29	37	33	42	29	31	31	35	29	28	26	29	35	35	45	44	42	27	29	35	30	30.1
Vineland	Maximum	52	43	42	45	40	40	58	50	40	44	41	54	58	59	53	46	45	41	42	46	48	51	60	80	82	79	72	52	54	50	49	52.1
	Minimum	34	23	29	....	25	17	23	27	30	30	30	37	33	47	29	30	31	34	30	29	30	28	36	36	52	49	38	26	36	34	31	32.1[a]
Philadelphia, Pa.	Maximum	46	42	39	43	41	38	50	46	39	41	42	58	59	54	51	40	50	41	41	45	47	52	56	74	74	75	62	53	52	45	47	49.8
	Minimum	32	29	26	22	23	22	28	31	34	31	32	37	37	42	36	33	33	33	32	32	34	34	41	41	58	56	34	32	38	36	33	34.3
The Sea Coast.																																	
Asbury Park	Maximum	45	40	37	38	40	35	46	44	37	38	40	55	47	55	47	40	42	40	40	44	46	52	52	....	67	....	57	52	44	40	44	45.0[b]
	Minimum	30	25	25	19	23	18	24	28	32	34	34	37	32	40	34	32	32	34	30	30	30	34	34	37	44	42	36	28	35	36	30	31.6
Atlantic City	Maximum	48	41	40	41	41	37	43	43	41	37	43	54	44	59	49	40	40	39	42	44	46	49	57	54	60	57	55	50	45	52	46	46.4
	Minimum	30	28	25	22	26	20	34	30	37	31	34	39	36	39	36	31	33	35	32	33	31	34	38	42	47	45	33	31	40	38	32	33.6
Cape May City	Maximum	46	44	40	43	39	36	46	45	44	42	44	50	48	56	52	40	42	40	43	46	46	53	56	56	65	62	53	54	50	53	47	47.8
	Minimum	33	31	27	19	26	20	31	32	37	34	34	37	36	39	32	32	32	34	32	33	33	36	40	41	47	46	36	35	37	39	34	34.0
Long Branch	Maximum	38	37	35	37	33	37	49	45	36	37	41	56	45	57	45	35	47	37	38	40	44	54	50	70	73	66	53	48	41	39	41	45.3
	Minimum	28	22	20	18	20	14	23	21	27	26	28	34	32	38	31	30	32	30	27	28	27	32	34	32	50	38	33	25	34	35	27	28.9
Sandy Hook	Maximum	43	37	37	40	37	35	45	43	36	37	38	49	44	49	45	37	44	38	39	43	44	48	48	67	68	58	55	49	42	40	43	44.5
	Minimum	30	29	23	21	22	20	28	28	31	29	33	36	33	39	36	33	33	34	32	31	33	36	39	38	42	41	34	30	35	35	32	32.1

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	*	*	*	*	.320	*	*	*	.416	*	*	.018	.032	.024	.096	.080	.122	.084	.014	.128	.080	.096	.060	.160	.128	.128	.144	192	.160	.020	.110	2.612
	Wind movement	82	114	77	141	91	42	100	*	232	81	61	44	77	64	70	62	153	77	107	75	83	117	88	87	80	128	144	73	119	117	100	2,886
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...	....	....	....	....	....	....	..	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

51.65
(NJ)

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

G. HAROLD NOYES, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. APRIL, 1928. No. 4

GENERAL SUMMARY.

The weather during April was not quite up to normal warmth, but slightly exceeded the normal amount of clear weather and sunshine, although the amount and frequency of rain was also slightly above normal. A warm wave prevailed from the 4th to the 7th, and there were a few other scattered warm days, but it was consistently cool, and frosty mornings persisted well toward the close of the month. A storm of marked severity in adjoining states on the 12th caused a little snow in New Jersey, which amounted to but little. Only one rain storm occurred during the first ten days, but thereafter showers were frequent. The total precipitation for the month was well up toward the high April record, and has been exceeded only six times in the past 43 Aprils.

The deficiency in warmth and frequency of showers caused considerable retardation of the development of vegetation, and crops and farm work were some two weeks backward at the close of the month. There was little damage from frost or severe cold to susceptible bloom, and in a general way agriculture was not adversely affected to any great extent by the weather of the month.

Storm warnings were displayed along the coast on the 11th, 14th, 19th, 21st, 22d, 23d, 27th and 28th.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 47.4°, which was 1.9° below normal. The highest temperature was 85° at South Orange on the 5th, and the lowest, 16°, at Runyon on the 3d. The greatest daily range of temperature was 50° at Layton and Runyon on the 4th. The highest monthly mean temperature was 50.6° at Vineland, and the lowest, 44.8° at Layton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +1.2°; Red Sandstone Plain, +0.6°; Southern Interior, +0.5°; Sea Coast, +0.7°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 41 stations, was 5.26 inches, which was 1.64 inches above normal. The average total snowfall at twenty-two selected stations was 0.9 inch, which was 0.6 inch below normal.

The greatest monthly precipitation was 7.16 inches, at Tuckerton, and the least, 3.82 inches at New Milford. The greatest amount of precipitation in any 24 consecutive hours was 3.05 inches at Tuckerton on the 27-28th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 12, or 2 more than normal.

The precipitation accumulated departure from the normal for the year, 1928, to date, by sections, is: The Highlands, —0.56 inch; Red Sandstone Plain, —0.12 inch; Southern Interior, —0.43 inch; Sea Coast, —1.74 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 14 miles per hour, which was 1 mile above normal. The highest velocity, sunstained for 5 consecutive minutes, was 72 miles per hour from the northeast at Atlantic City on the 28th. High winds also occurred on the 11th, 14th, 19th, 21st, 23d, 24th, 25th, 27th and 28th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 12, which was normal; partly cloudy, 8, or 1 less than normal; cloudy, 10, or 1 more than normal. The per cent of possible sunshine was 60, which was 3 per cent above normal.

MISCELLANEOUS.

The mean stage of the Delaware River at Phillipsburg was 7.1 feet, and the highest 9.8 feet on the 28th and 30th. At Trenton the mean daily stage was 3.9 feet, which was normal; the highest stage was 5.9 feet on the 25th.

The mean atmospheric pressure, reduced to sea level, was 29.96 inches, which was 0.04 inch below normal. The highest reading was 30.53 inches at Atlantic City, Long Branch and Ridgefield on the 3d, and the lowest, 29.23 inches at Trenton on the 28th.

Dense fog occurred on the 8th. Thunderstorms were recorded on the 21st, 22d, and 30th. Sleet fell on the 11th, 12th, 21st, 25th, 27th and 28th. Solar halos were observed on the 9th, 12th and 21st, and lunar halos on the 11th, 29th, and 30th. Auroras were observed on the 19th and 20th. Killing frosts occurred in northern districts and in the central and southern interior on the 27th or 28th. In the middle and lower Delaware Valley and along the Atlantic coast the last killing frost occurred on the 18th or 21st.

COMPARATIVE DATA FOR APRIL

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	48.4	88	26	2.79	2.86	0.89	......	......	......	......	......
1886	50.6	86	**27**	3.40	5.48	1.86	......	......	......	......	......
1887	47.3	87	16	2.70	3.77	0.91	......	......	......	12	7
1888	47.9	92	22	3.28	4.68	1.89	......	......	......	6	9
1889	51.2	83	25	5.32	7.25	2.92	......	......	......	14	12
1890	50.4	86	21	2.65	4.58	1.89	......	......	......	7	8
1891	52.0	88	20	2.19	3.80	1.39	......	13	11	6	8
1892	49.3	87	19	2.49	4.41	1.05	......	9	13	8	8
1893	49.2	82	19	5.21	7.12	2.97	......	9	10	12	11
1894	50.3	88	10	3.09	4.86	1.71	......	12	9	9	9
1895	49.1	89	19	4.88	7.75	3.47	T.	11	7	12	10
1896	52.4	**98**	12	*1.35*	*2.30*	0.64	3.1	13	10	7	7
1897	50.4	89	19	3.79	6.98	2.17	T.	14	11	5	9
1898	47.8	*81*	13	3.74	4.94	2.17	2.9	8	11	11	11
1899	49.9	88	18	1.73	3.25	*0.48*	T.	16	10	4	4
1900	50.8	82	18	2.29	3.03	1.59	T.	14	9	7	6
1901	48.3	89	23	**6.31**	**10.22**	3.46	0	8	7	15	12
1902	50.2	93	20	3.62	5.99	2.45	0	10	11	9	9
1903	50.9	92	18	3.97	7.03	2.40	0	13	7	10	9
1904	46.7	85	16	3.42	4.71	2.00	0.1	9	12	9	10
1905	49.9	84	18	2.88	4.03	1.53	0.1	12	11	7	10
1906	51.2	87	17	3.64	6.42	1.17	T.	15	10	5	8
1907	*45.2*	83	19	3.78	8.67	2.06	4.8	11	9	10	11
1908	51.2	93	13	2.72	3.86	1.42	T.	14	9	7	11
1909	50.2	88	17	5.97	8.90	3.84	0.8	10	11	9	13
1910	53.5	88	20	5.34	7.56	3.43	0	9	11	10	12
1911	47.4	88	14	4.11	5.58	2.87	2.6	10	10	10	11
1912	50.4	82	18	3.56	6.02	1.81	0	9	10	11	14
1913	52.1	89	19	5.78	8.53	4.14	T.	14	7	9	11
1914	48.4	89	16	3.67	4.78	2.35	0	13	10	7	11
1915	54.4	96	20	2.71	4.13	1.28	**11.5**	14	10	6	9
1916	48.2	85	21	3.32	6.14	0.90	4.4	10	9	11	13
1917	48.8	88	21	2.39	3.54	1.19	4.7	15	8	7	9
1918	49.8	*81*	22	4.05	5.79	2.88	2.6	11	8	11	12
1919	49.3	85	15	3.06	4.79	2.20	T.	13	7	10	10
1920	48.0	85	13	4.50	6.06	2.90	T.	12	9	9	13
1921	**56.3**	87	20	3.57	5.20	1.86	0.4	13	6	11	11
1922	51.0	89	18	2.55	4.12	1.57	T.	15	7	8	10
1923	50.0	91	*3*	3.55	6.59	2.27	0.5	16	6	8	9
1924	48.0	81	18	6.15	9.23	4.74	6.6	15	6	9	11
1925	51.4	88	15	2.40	3.35	1.31	0	15	7	8	9
1926	46.4	87	14	2.05	2.97	1.39	T.	13	10	7	8
1927	47.5	93	17	2.42	3.97	1.00	0.3	14	7	9	9
1928	47.4	85	16	5.26	7.16	3.82	0.9	12	8	10	12

W. B. O. Philadelphia-5-24-28-810.

Climatological Data for April, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	47.6^{a}	−2.2	83	5	25	2†	48	5.14	+1.48	1.36	T.	13	17	7	6		Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	46.0^{b}	−0.8	81	5	18	2	47	4.73	+0.41	1.33	1.5	13	1	17	12	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27					22	2		4.38	+0.56	1.05	5.9	13	17	8	5	e.	Brice E. Riker.
Dover	Morris	600	44	45.8^{b}	−1.6	82	5	22	2	43	4.91	+1.15		1.5	12	6	16	8		William C. Harris.
Layton	Sussex	480	27	44.8^{a}	−2.4	81	5	19	2	50	5.17	+1.56	1.26	4.0	13	13	2	15	w.	A. M. Depue.
Newton	Sussex	769	44																	Irving J. Kern.
Phillipsburg	Warren	363	45	47.5	−2.4	82	5	26	2†	46	§			0.6	13	15	7	8		Town Engineer.
Sussex	Sussex	442	33	45.7	−2.9	81	5	21	2†	43	4.98	+1.54	1.18	T.	12	7	7	16	w.	A. J. W. Mowatt.
Means and extremes				46.2	−2.0	83	5	18	2	50	4.88	+1.12	1.36	1.9	13	11	9	10	w.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	46.8^{g}	−2.7			30	3†		§		1.25	T.	12	7	14	9		William Mann.
Boonton	Morris	400	§38	45.4	−3.3	80	5	22	2†	45	5.17	+1.18	1.34		11	18	1	11	nw.	John Kline.
Chatham	Morris	185	24								5.57	+1.47	1.44		11	18	6	6		Paul Molitor, Sr.
Elizabeth	Union	45	49					25	3†		4.71	+1.03	1.25	T.	13	16	6	8	nw.	Union County Park Com
Flemington	Hunterdon	140	§42	48.2	−2.2	81	5†	25	3†	45	5.69	+2.17	1.39	5.0	12	20	3	7	w.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	47.2	−1.3	81	5	25	17	41	5.06	+1.63	1.70	1.0	10	11	7	12	w.	Charles J. Bates.
Jersey City	Hudson	10	30	48.6	−1.4	83	5	28	16	38	4.76	+0.60	1.20	T.	11	11	12	7	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	47.1	−3.6	79	5†	26	16	39	5.89	+2.31		1.0	14	16	4	10	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	47.0	−2.9	82	5	24	2	43	5.72	+1.60	1.68	0.5	9	13	9	8	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	75	49.0	−0.6	81	5†	25	3	41	4.32	+0.58	1.11	T.	12	13	10	7	se.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10								3.82		0.93		12					Hackensack Water Co
Paterson	Passaic	80	57	48.1	−2.4	83	5	27	2	40	5.06	+1.50	1.40	0.5	13	17	8	5	nw.	Marion T. Probert.
Plainfield	Union	120	40	46.8	−2.8	82	5	22	3†	42	4.67	+0.77	1.14	T.	13	9	11	10	nw.	E. D. Pearson.
Ridgefield	Bergen	80	11	46.6		82	5	27	16	39	4.77			T.	13	11	9	10	nw.	George P. Kirsten.
Somerville	Somerset	70	45	47.4^{b}	−2.1	82	5	22	17†	42	5.13	+1.64	1.13	T.	14	13	11	6	w.	Arthur Gerlich.
South Orange	Essex	200	58	47.6^{a}	−0.9	85	5	25	2†	43	4.50	+0.93	1.43	T.	12	12	11	7	w.	Everett W. Bird.
Verona	Essex	490	2	46.3		80	5	26	16	38	5.38		1.33	1.6	15	11	6	13	w.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10								4.53		0.85		11					Hackensack Water Co.
New York, N. Y.		365	58	47.5	−1.9	77	5	28	16	35	4.71	+1.48	1.32	T.	11	8	10	12	nw.	U. S. Weather Bureau.
Means and extremes				47.3	−2.2	85	5	22	2†	45	4.99	+1.34	1.70	6.9	12	14	8	8	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	47.4	−3.2	80	5	18	18	41	5.37	+1.72		0.3	11	12	7	11	nw.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	48.6	−4.1	80	5	24	17†	39	4.79	+1.27	1.96	0	10	7	9	14	s.	Paul T. Kornman.
Burlington	Burlington	12	§42	49.8	−2.0	82	5	26	3†	39	5.39	+1.69	1.38	T.	13	14	5	11	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	48.8	−2.4	80	5†	25	18	38	5.80	+2.32	1.39	T.	15	6	15	9	sw.	Harry P. Campbell.
Hammonton	Atlantic	103	24																	
Hightstown	Mercer	120	34	47.9^{b}	−2.6	84	6	24	2†	44	5.72	+1.81	1.48	T.	13	13	6	11	sw.	Charles Welsh.
Imlaystown	Monmouth	115	37																	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	48.6	−1.7	83	5	20	17	48	5.52	+2.09	1.72	T.	11	11	9	10	sw.	James M. Armstrong.
Lakewood	Ocean	54	24	47.8	−1.6	82	5	22	3	42	5.87	+2.20	1.80	T.	13	13	5	12	nw.	R. W. Holman.
Moorestown	Burlington	75	65	48.1	−2.3	81	5	25	3	40	5.78	+2.49	1.68	T.	11	11	7	12	nw.	John B. Warrick.
Northfield‡‡	Atlantic	25	21								6.22	+2.76	2.50	T.	10					William L. Flick.
Pleasantville‡‡	Atlantic	26	30	46.4		78	19	19	17	48	6.87	+3.52	2.57		10	16	7	7	nw.	N. J. Dept. Conservation.
Riverton	Burlington		2			82	5	28	3	40				T.						Japanese Beetle Laboratory
Runyon‡‡	Middlesex	18	4	47.3^{d}		83	5†	16	3	50	5.85		1.48		12	15	10	5	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	48.2	−1.6	79	5	28	16	38	4.67	+1.38	1.24	1.2	12	9	9	12	w.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	47.8	−1.5	79	19	24	3†	37	7.16	+3.42	3.05	T.	10	16	2	12	ne.	John H. Brown.
Vineland	Cumberland	109	59	50.6^{e}	−0.4	83	5	25	18	38	§				11					H. C. Himes
Philadelphia, Pa		117	57	50.6	−1.5	81	19	31	16	36	5.55	+2.50	1.56	1.0	10	10	9	11	w.	U. S. Weather Bureau.
Means and extremes				48.3	−2.1	84	6	16	3	50	5.77	+2.22	3.05	0.1	12	12	8	10	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	46.6	−1.9	81	19	29	16	39	5.55	+1.86	1.40	T.	10	16	7	7	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	47.6	−0.2	70	19	30	11	24	6.87	+3.88	2.52	T.	11	12	10	8	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	49.2	+0.8	72	19	30	17	26	4.17	+1.18	1.43	T.	14	14	5	11	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	45.7	−2.4	78	19	27	17†	41	5.56	+1.01	1.29	T.	12	9	10	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	30	47.1	+0.1	75	5	31	16	30	4.26	+0.30	1.17	T.	11	8	10	12	w.	U. S. Weather Bureau.
Means and extremes				47.2	−0.7	81	19	27	17†	41	5.28	+1.65	2.52	T.	12	12	8	10	nw.	
For the State				47.4	−1.9	85	5	16	3	50	5.26	+1.64	3.05	0.9	12	12	8	10	nw.	

The departures from normal temperature and precipitation are computed only from records for stations that have ten or more years of observation, but all complete reports are used in determining means for the State. † On other dates also.

Reference letters, ^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. T. indicates precipitation less than .01 inch, rain or melted snow.

‡‡ Post-Office addresses are as follows: of Beaver Dam, Beaver; of Elk Lick, Salisbury; of Ingram, Crafton, Pittsburgh; of Lycippus, Greensburg; of Neshaminy, Oakford; of Sharon, Farrell; of Shawmont, Manayunk; of West Bingham, Genesee.

Daily Precipitation for April, 1928

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware								.23				.70		.40							.20	1.10	.40	.27	.09		.17	1.36	.13	.09		5.14
Charlotteburg	Passaic								.25			*	.84	T.	.21	T.						*	.88	.16	.92			*	1.33	.14	*		4.73
Culvers Lake	Delaware								.26				.51		.55	.13		T.				.01	1.03	.48	.12	T.		.02	1.05	.17	.05		4.38
Dover	Passaic							.20				*	.80		.37			T.				*	1.13	*	1.13	T.		*	.99	.21	.08		4.91
Layton	Delaware								.43				.68		.43	.18		T.		T.		.31	.86	.37	.28			.13	1.26	.06	.08		5.17
Newton	Delaware																																......
Phillipsburg	do							.18	T.			.32	.40		.39			.01		T.		.36	§	.16	.04	T.		.39	§	.05	.03		§
Sussex	Hudson								*			*	1.18		.39			T.				*	1.09	.26	.60			.14	1.13	.12	.07		4.98
The Red Sandstone Plain.																																	
Bayonne	Coast								.05			.13	.30	.10				T.				§	§	§	§	.03		.07	1.25	.08			§
Boonton ‖‖	Passaic								.21				.70		T.	.27							.47	.67	1.29	.02			1.34	.20			5.17
Chatham ‖	do								.21				.51			.24		T.			T.		.59	.91	1.43	.03	T.		1.44	.21	T.		5.57
Elizabeth	Coast								.10				.48	T.	.15			T.		.01			1.05	.67	.83	.03		.06	1.25	.08	T.		4.71
Flemington	Raritan								.12				.41		.41			.05		T.		T.	1.18	.89	.98	.07		.12	1.39	.07	T.		5.69
Highwood	Hackensack								.09				.62	T.	.13	T.		T.		T.			1.14	.32	1.03	T.		.03	1.62	.08			5.06
Jersey City	Coast								.09			.02	.55		.13			T.		T.		.17	1.20	.74	.50	T.		.30	1.00	.06	T.		4.76
Lambertville	Delaware								.20			T.	.51		.31			.08		T.		.23	.87	1.34	.42	.03		*	1.75	.11	.04		5.89
Little Falls ‖‖	Passaic								.09				.73			.13				T.			.69	.72	1.44				1.68	.24			5.72
New Brunswick	Raritan								.08				.42		.17			.02				T.	.84	.79	.76	T.		.08	1.11	.05	T.		4.32
New Milford.**	Hackensack								.08			.21	.40		.13							.35	.59	.68	.25			.38	.68	.06	.01		3.82
Paterson	Passaic								.06				.61		.14			T.		T.			1.20	.42	.97	.01		.07	1.40	.14	.04		5.06
Plainfield	Raritan								.10			.01	.35		.20			.01		T.		.22	.80	.50	.92	.01		.30	1.14	.11	T.		4.67
Ridgefield	Hackensack								.10			*	.45		.18			T.		T.		*	1.46	*	1.11	.02		*	1.30	.13	.02		4.77
Somerville	Raritan								.18				.55	.01	.23			.03		T.		.05	1.01	.66	1.01	.04		.10	1.13	.13	T.		5.13
South Orange	Rahway								.04				.34		.19			T.		T.		T.	.80	.45	1.15	.02		.08	1.43	.44			4.50
Verona**	Passaic								.07	.06		.28	.31		.19			T.		.01		.44	.90	1.19	.16	.04		.55	1.09	.02	.07		5.38
Woodcliff Lake**	Hackensack								.06			.20	.36		.16							.51	.78	.80	.17			.48	.85		.16		4.53
New York, N. Y***	Coast							T.	.08			.35	.17		.14			T.		T.		.35	1.06	1.02	.15	T.		.47	.89	.03	T.		4.71
The Southern Interior.																																	
Belleplain	Tuckahoe						T.		.06		.38	.07	.47									*	*	1.79	.40			*	2.17	.03			5.37
Bridgeton	Coast								*		*	*	.58		.08							*	1.05	1.12				.28	1.68				4.79
Burlington	Delaware								*			*	.83		.32			.02				.03	1.08	.92	.62	.10		.03	1.38	.06			5.39
Clayton	Delaware								.18		.05	.18	.36	.02	.05			.05				.53	1.09	1.05	.31	T.		.48	1.39	.04	.02		5.80
Hammonton	Mullica																																......
Hightstown	Raritan								.30			*	.91		.14			.06		T.		*	.82	1.10	.75	.05		.08	1.40	.11			5.72
Imlaystown	Delaware																																......
Indian Mills	Mullica								.14		.04	.03	.65		.08			T.				T.	1.72	.78	.55	T.		T.	1.53				5.52
Lakewood	Metedeconk								*		T	.10	.86		.10			.06		T.		.05	1.35	.85	.60	.04		T.	1.80	.06			5.87
Moorestown	Delaware								.21			*	.63		.20			.03				.10	1.30	1.03	.54			.06	1.68				5.78
Northfield	Coast								.05		.26	.13	.40					T.				.24	1.42	.77	.44			.01	2.50				6.22
Pleasantville ‖‖	Coast								.52		.20	.20	.34	.02									1.04	.66	1.29	.01			2.57	.02			6.87
Riverton ‖‖	Delaware			T.					.15																								§
Runyon	Coast								*				.95		.17							.22	1.04	.96	.87	.03		.07	1.48	.06			5.85
Trenton***	Delaware							.27				.29	.50		.28			.04		T.		.56	.57	1.22	.03			.53	.37	.01	T.		4.67
Tuckerton	Coast								.02		.26	.08	.69					T.				*	1.21	1.24	.61				3.05				7.16
Vineland	Maurice								.10		.22	.03	.59		.03							.07	1.20	1.05	§			§	§				§
Phila., Pa***	Delaware							.14				.35	.78		.14			T.		T.		.55	.45	1.55	.03			1.01	.55				5.55
The Sea Coast.																																	
Asbury Park	Coast								.15		T.	.50	.30		T.			.05				.45	1.10	1.20	.40	T.		T.	1.40				5.55
Atlantic City***	do							.02	.01		.42	.71	.03		T.			T.				1.19	.83	1.09	.05			1.60	.92				6.87
Cape May City	do	T.							.01		.57	.38	.21	.01		.01		.02	T.			.14	.46	.42	.48	.03		.44	.99	T.			4.17
Long Branch	do								.11		T.	.50	.29		.15			.07		T.		.39	.80	1.29	.54	T.		.49	.90		.03		5.56
Sandy Hook***	do								.11			.37	.23		.09			.03		T.		.42	.80	1.06	.13	T.		.31	.71	T.	T.		4.26

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.97	30.53	3	29.26	28	19.2	72	ne.	28	72	61	73	60
New York, N. Y	29.96	30.53	3	29.33	28	18.3	61	nw.	19	63	55	59	63
Philadelphia, Pa	29.98	30.52	3	29.24	28	12.3	47	ne.	27	70	62	65	57
Ridgefield	29.96	30.53	3	29.34	28	......	......	......	......	......	......	......	......
Riverton	......	......	......	......	......	......	......	......	......	......	......	......	......
Sandy Hook	29.95	30.52	3	29.26	28	16.8	50	ne.	28	69	58	67	58
Trenton	29.96	30.51	3	29.23	28	12.8	41	e.	28	76	62	66	61
Verona	29.97	30.51	3	29.26	28	8.7	36	w.	19	63	49	58	......
Long Branch	29.97	30.53	3	29.26	28	......	......	......	......	70	69	56	......

Daily Temperatures for April, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	51	60	....	81	83	82	80	68	52	53	48	....	65	64	61	52	45	59	80	72	53	41	49	62	55	59	50	43	60	75	....	60.8[b]
	Minimum	26	25	26	33	41	44	53	45	35	33	30	32	35	35	35	26	25	26	41	36	30	35	38	38	33	34	30	33	36	41	....	34.3
Charlotteburg	Maximum	46	51	56	77	81	79	78	69	58	49	....	....	64	60	58	46	43	58	78	75	52	46	47	59	57	53	51	44	....	70	....	59.4[c]
	Minimum	27	18	20	30	37	42	51	47	33	29	25	....	32	31	38	24	21	28	40	32	24	34	36	35	37	36	31	33	35	37	....	32.5[a]
Dover	Maximum	48	54	56	77	82	78	76	65	53	48	45	55	63	61	57	49	43	57	78	62	52	43	....	61	50	55	48	43	57	68	....	58.1[a]
	Minimum	27	22	23	34	....	45	51	38	34	31	27	32	41	36	30	24	23	27	39	35	....	36	37	36	33	36	29	33	36	42	....	33.5[b]
Layton	Maximum	48	55	61	80	81	80	78	61	48	52	47	57	64	54	58	45	44	59	79	62	57	38	47	....	52	54	49	40	57	72	....	57.9[a]
	Minimum	25	19	22	30	39	40	52	42	31	29	24	32	39	33	33	24	21	23	40	33	22	33	....	36	34	37	25	32	34	34	....	31.7[a]
Newton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Phillipsburg	Maximum	51	55	59	79	82	81	78	60	52	49	47	59	65	65	56	50	44	59	80	56	50	41	48	61	53	57	49	43	61	72	....	58.7
	Minimum	30	26	29	33	44	49	53	41	37	35	32	33	39	41	33	30	26	28	42	39	32	37	39	40	39	35	32	36	37	41	....	36.3
Sussex	Maximum	47	54	57	79	81	80	80	64	56	50	47	57	63	59	60	46	44	59	78	68	53	46	45	60	56	49	53	43	56	72	....	58.7
	Minimum	28	21	22	36	40	41	46	46	33	30	26	32	37	34	36	24	21	22	42	33	23	34	37	37	35	37	26	32	34	36	....	32.7
The Red Sandstone Plain.																																	
Bayonne	Maximum	44	....	45	62	....	75	62	....	....	42	44	56	66	62	60	50	43	54	76	56	54	42	48	....	50	....	54	48	60	66	....	55.0[f]
	Minimum	32	31	30	....	....	56	50	....	31	33	36	34	46	45	40	30	32	....	40	38	....	....	38	39	40	42	38	....	....	46	....	38.5[h]
Boonton§§	Maximum	50	53	59	76	80	79	79	59	50	50	46	56	66	62	47	48	45	57	77	54	52	44	47	61	51	55	52	45	59	67	....	57.5
	Minimum	27	22	22	31	40	41	45	50	37	32	26	32	39	35	38	26	23	23	36	35	26	35	37	37	36	37	28	32	37	37	....	33.4
Elizabeth	Maximum	50	51	59	79	....	....	78	....	....	....	....	60	69	....	....	52	54	59	81	....	....	49	51	66	60	61	....	....	64	70	....	61.8[l]
	Minimum	27	29	25	34	42	44	51	47	32	36	34	33	38	42	36	27	25	27	....	38	33	39	39	39	37	....	35	38	38	44	....	36.0[b]
Flemington	Maximum	53	59	59	78	81	80	79	67	58	49	44	61	68	64	63	54	45	60	81	68	60	42	46	63	55	60	54	46	63	69	....	61.0
	Minimum	29	26	25	33	42	44	46	48	34	35	30	33	40	39	37	27	25	28	40	38	30	38	38	39	37	35	31	36	37	45	....	35.5
Highwood	Maximum	48	51	53	73	81	79	74	67	59	51	46	57	65	65	58	50	47	59	80	56	50	44	46	61	53	57	51	47	56	70	....	58.5
	Minimum	28	26	26	34	40	48	51	50	36	35	28	33	43	37	41	26	25	28	41	36	28	38	39	37	39	37	30	38	39	40	....	35.9
Jersey City	Maximum	48	52	50	74	83	80	72	61	52	47	45	59	66	64	60	51	47	58	80	57	49	45	47	62	52	56	49	47	59	70	....	58.1
	Minimum	31	37	35	43	51	54	42	46	37	35	35	33	46	44	38	28	32	33	42	36	38	38	39	36	40	39	39	38	38	49	....	39.1
Lambertville	Maximum	48	55	59	74	79	77	76	63	50	46	42	58	63	62	61	49	41	57	79	66	49	41	45	60	51	56	49	43	60	69	....	57.6
	Minimum	27	30	29	39	50	50	51	45	34	34	30	32	41	44	37	26	29	28	40	38	33	38	38	38	38	35	36	34	35	39	....	36.6
Little Falls§§	Maximum	....	55	52	76	82	81	75	73	52	43	45	56	66	62	45	50	43	56	78	56	46	45	47	65	55	56	51	48	59	72	....	58.3[a]
	Minimum	31	24	25	33	41	45	48	50	36	33	29	36	40	36	39	26	27	31	41	36	29	36	38	37	37	39	31	34	38	42	....	35.6
New Brunswick	Maximum	50	51	59	75	81	81	76	68	63	51	46	59	65	65	67	49	49	59	78	75	55	45	47	63	58	56	55	49	62	72	....	61.0
	Minimum	30	30	25	34	45	50	52	50	35	35	31	33	43	43	39	28	26	27	40	38	34	38	39	38	40	35	32	36	38	42	....	36.9
Paterson	Maximum	49	53	54	77	83	81	74	64	55	52	45	57	65	57	58	50	46	59	80	70	50	41	45	61	55	55	51	45	57	71	....	58.7
	Minimum	30	27	28	37	45	49	50	50	37	35	34	34	45	41	40	28	29	31	41	37	34	37	38	38	39	39	36	35	38	44	....	37.5
Plainfield	Maximum	49	53	50	76	82	80	79	62	53	47	43	59	66	64	52	52	47	60	80	57	49	45	47	62	53	56	....	46	59	70	....	58.6[a]
	Minimum	29	25	22	34	46	41	44	50	35	34	29	33	40	36	38	26	22	24	38	37	29	38	37	36	39	37	37	36	37	41	....	35.0
Ridgefield	Maximum	49	51	53	74	82	79	69	61	51	45	44	57	65	60	55	50	45	59	79	56	49	41	44	61	51	55	51	47	56	70	....	57.0
	Minimum	29	28	30	38	45	52	49	39	35	31	31	32	44	39	30	27	29	30	40	36	32	38	38	37	35	37	34	38	38	46	....	36.2
Somerville	Maximum	52	55	60	75	82	79	78	71	60	48	45	58	65	62	64	50	46	58	81	70	49	43	46	61	53	57	54	....	....	....	....	60.1[c]
	Minimum	27	26	23	33	42	44	50	45	35	35	28	33	41	38	33	26	22	22	39	39	28	39	39	39	37	33	29	37	40	40	....	34.7
South Orange	Maximum	50	53	58	77	85	83	80	68	53	51	45	59	67	....	62	51	51	61	81	....	50	41	45	63	59	58	56	47	62	71	....	60.2[b]
	Minimum	27	25	25	35	42	43	46	46	33	35	28	33	42	37	35	27	25	26	38	37	31	39	39	38	38	34	30	37	38	41	....	35.0
Verona	Maximum	46	50	53	74	80	78	72	60	50	45	43	54	62	58	58	47	45	55	78	52	47	39	44	59	50	52	49	45	57	69	....	55.7
	Minimum	30	29	29	40	52	52	53	45	35	32	31	32	43	43	34	26	28	30	40	35	32	37	37	36	35	36	35	35	36	48	....	36.9
New York, N. Y	Maximum	47	50	48	68	77	74	65	58	50	44	45	56	64	61	59	49	45	54	77	54	47	45	47	59	50	54	49	47	58	68	....	55.6
	Minimum	31	38	36	43	53	55	42	42	37	35	35	33	46	45	32	28	33	34	42	36	39	38	39	36	40	39	39	38	38	50	....	39.4
The Southern Interior.																																	
Belleplain	Maximum	49	55	56	73	80	78	73	65	58	51	42	60	66	66	62	51	55	56	78	65	51	50	49	64	54	55	54	50	64	76	....	60.2
	Minimum	26	26	20	32	44	48	50	48	29	31	32	33	40	35	39	25	19	18	41	35	27	41	43	38	36	35	29	40	36	46	....	34.7
Bridgeton	Maximum	50	55	56	74	80	77	73	63	58	50	41	60	61	66	63	49	52	56	79	62	55	48	49	63	54	55	49	48	63	73	....	59.4
	Minimum	32	31	28	35	51	53	51	48	35	32	33	34	38	40	39	27	24	24	43	44	33	38	45	40	43	36	35	38	38	48	....	37.9
Burlington	Maximum	54	54	58	74	82	80	78	73	60	51	44	60	65	65	64	51	50	59	79	....	55	46	46	61	59	56	56	50	61	71	....	60.8[a]
	Minimum	32	36	26	35	45	47	52	54	39	37	33	33	42	45	37	28	26	32	41	42	35	41	40	40	40	39	34	38	39	54	....	38.7
Clayton	Maximum	49	55	58	74	80	78	71	61	51	46	41	60	65	66	63	49	47	58	80	71	54	47	46	63	59	55	49	48	62	73	....	59.3
	Minimum	31	30	29	37	51	48	51	50	33	33	33	34	41	46	40	28	26	25	42	44	31	43	41	40	42	36	36	39	38	49	....	38.2
Hightstown	Maximum	50	55	60	77	82	84	78	66	57	48	43	60	66	69	66	50	46	58	80	....	50	46	46	62	60	57	55	48	63	67	....	60.3[a]
	Minimum	29	24	24	33	46	50	53	49	34	36	....	32	43	40	38	26	24	25	40	....	27	39	38	38	39	34	30	36	33	35	....	35.5[b]
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	50	54	60	80	83	81	77	66	59	50	42	60	67	68	65	49	48	60	80	73	53	46	45	64	60	54	53	48	63	75	....	61.1
	Minimum	28	26	26	32	48	47	49	47	30	33	32	33	40	39	40	28	20	22	40	43	30	40	40	39	37	34	30	39	39	48	....	36.0
Lakewood	Maximum	50	47	56	74	82	80	74	63	58	49	41	58	65	65	63	51	48	60	79	74	49	45	45	62	59	57	55	50	62	76	....	59.9
	Minimum	29	25	22	32	42	46	49	49	30	34	30	33	41	40	38	27	23	26	39	40	32	39	39	38	38	34	30	38	37	47	....	35.6
Moorestown	Maximum	48	56	59	75	81	79	77	65	56	49	42	58	65	65	63	50	48	53	78	57	52	45	45	64	53	56	50	49	63	72	....	59.1
	Minimum	29	29	25	35	46	47	49	49	37	34	32	31	42	43	37	26	28	27	48	42	34	38	39	38	38	36	35	36	36	47	....	37.1
Pleasantville§§	Maximum	50	50	54	67	68	68	68	66	57	42	48	62	67	67	50	50	49	68	78	59	50	51	45	64	55	56	56	55	64	71	....	58.5
	Minimum	27	27	20	37	45	46	46	46	27	34	32	33	33	36	36	27	19	20	41	43	28	42	41	38	37	32	30	30	30	44	....	34.2
Riverton	Maximum	51	55	60	77	82	79	76	62	51	45	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	32	32	28	37	51	52	52	42	39	32	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Maximum	52	54	61	78	83	83	78	....	60	50	46	61	66	65	67	....	50	60	....	65	58	....	....	62	64	58	57	48	64	73	....	62.5[e]
	Minimum	22	26	16	28	36	50	42	40	33	33	20	32	42	32	34	24	22	26	....	....	22	38	36	38	36	33	25	36	36	42	....	32.1[b]
Trenton	Maximum	51	55	59	75	79	78	75	60	51	44	42	59	63	65	56	48	46	58	79	54	50	44	46	61	51	55	50	48	61	71	....	57.8
	Minimum	31	33	32	40	51	51	54	40	37	35	33	32	44	47	32	28	32	30	41	40	35	40	39	39	41	37	39	39	38	50	....	38.7
Tuckerton	Maximum	52	49	52	68	69	70	69	64	55	51	41	60	68	63	58	52	52	58	79	75	50	48	46	64	60	56	48	54	62	70	....	58.8
	Minimum	28	29	24	36	45	47	48	49	32	32	35	33	40	43	39	24	25	24	42	43	31	42	40	38	38	35	42	34	33	49	....	36.7
Vineland	Maximum	51	59	60	77	83	81	75	69	57	50	42	62	68	66	67	52	50	59	80	58	59	50	58	64	60	....	....	....	....	....	....	62.3[e]
	Minimum	30	33	30	40	52	50	50	54	33	33	33	34	40	46	44	26	26	25	42	43	36	43	43	41	42	....	....	....	....	....	....	38.8[e]
Philadelphia, Pa	Maximum	50	57	58	73	80	78	75	62	51	47	45	60	67	66	60	49	44	56	81	58	56	47	47	64	54	57	50	48	64	71	....	59.2
	Minimum	34	37	37	45	56	55	55	43	42	38	36	33	47	53	35	31	36	36	45	44	40	43	42	42	44	40	39	40	39	51	....	41.9
The Sea Coast.																																	
Asbury Park	Maximum	49	44	46	53	54	57	54	64	57	49	41	57	65	55	62	50	45	56	81	63	45	47	43	62	52	55	47	50	61	70	....	54.5
	Minimum	31	34	33	40	43	43	44	46	36	36	38	33	47	46	37	29	31	30	42	41	39	42	40	39	42	37	37	40	38	49	....	38.8
Atlantic City	Maximum	49	45	47	54	54	57	58	65	55	47	42	59	66	58	60	49	49	52	70	59	49	52	46	64	54	56	48	48	63	58	....	54.4
	Minimum	34	37	40	45	47	47	49	43	40	35	38	35	45	48	36	30	35	31	46	45	41	44	42	40	44	39	42	39	39	51	....	40.9
Cape May City	Maximum	52	52	52	60	60	60	62	65	58	45	42	60	65	58	58	48	52	53	72	59	52	55	52	66	56	56	56	52	64	70	....	57.1
	Minimum	36	36	37	45	48	47	48	44	42	37	39	38	46	48	36	30	30	31	46	43	36	48	42	41	44	42	44	40	40	51	....	41.2
Long Branch	Maximum	47	42	50	60	73	70	68	62	50	40	39	57	62	58	48	50	47	57	78	50	50	44	46	60	50	48	46	45	60	76	....	54.4
	Minimum	32	31	30	38	48	48	49	43	34	36	34	33	44	42	34	28	27	27	37	38	33	39	39	38	37	35	33	37	38	48	....	37.0
Sandy Hook	Maximum	47	46	46	60	75	70	62	60	50	42	43	54	60	61	53	49	45	56	73	53	45	45	43	58	51	53	48	48	58	68	....	54.1
	Minimum	34	35	35	41	45	51	49	43	39	38	36	35	45	46	34	31	36	36	43	40	38	41	40	39	43	40	41	40	40	50	....	40.1

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.160	.160	.144	.112	.160	.192	.648	.320	.200	.200	*	*	.120	.192	.128	.160	.080	*	.320	.144	.176	.004	.154	.202	.224	.160	.106	.020	.320	.192	....	4.998
	Wind movement	59	71	143	26	130	135	189	61	116	72	144	76	84	222	189	11	68	167	198	61	131	67	93	109	111	73	184	129	139	136	....	3,394
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

51.05
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JUN ... 1928
UNIVERSITY OF ILLINOIS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. MAY, 1928. No. 5

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The May mean temperature, 58.0°, was 2.2° below normal, and 10.6° higher than the mean of the month immediately preceding. The lowest means of May, 56.0° to 57.0°, occurred in the northernmost counties and along the shore; while the highest means, 59.8° to 60.8 were along the Delaware or in southern interior counties. The month averaged only 0.1° cooler than May, 1927. Notwithstanding the popular impression that it was a month of heavy rainfall, the monthly total of 2.23 inches was 1.42 inches less than the total of last May, and nearly an inch and a half less than normal. The impression is to be accounted for rather by the heavy rainfall of April. The number of cloudy and clear days, for the State in general, was very near the average.

Farm work and crops, both of which were backward at the close of April, made good progress during the month, and work was well caught up in central and southern counties at the close. Cool weather, however, and especially cool nights, and frosts, continued in May to hold back much growth.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 58.0°, which was 2.2° below normal. The highest temperature was 93° at Moorestown and Burlington on the 5th, and the lowest, 27°, at Layton on the 10th. The greatest daily range of temperature was 53° at Sussex on on the 10th. The highest monthly mean temperature was 60.8° at Burlington, and the lowest, 56.0° at Charlotteburg.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +0.6°; Red Sandstone Plain, 0.0°; Southern Interior, —0.1°; Sea Coast, +0.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 2.23 inches, which was 1.47 inches below normal.

The greatest monthly precipitation was 3.49 inches, at Atlantic City, and the least, 1.26 inches at Phillipsburg. The greatest amount of precipitation in any 24 consecutive hours was 1.26 inches at Atlantic City on the 8-9th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 12, or 1 more than normal.

The precipitation accumulated departure from the normal for the year, 1928, to date, by sections, is: The Highlands, —2.44 inches; Red Sandstone Plain, —1.92 inches; Southern Interior, —1.44 inches; Sea Coast, —2.81 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 10 miles per hour, which was 1 mile below normal. The highest velocity, sunstained for 5 consecutive minutes, was 45 miles per hour from the northeast at Atlantic City on the 7th. High winds also occurred on the 1st, 8th and 9th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 12, which was 1 less than normal; partly cloudy, 9, or normal; cloudy, 10, or 1 more than normal. The per cent of possible sunshine was 55, which was 5 per cent below normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 29.92 inches, which was 0.07 inch below normal. The highest reading was 30.47 inches at Trenton on the 14th, and the lowest, 29.50 inches at Atlantic City and Long Branch on the 26th.

The mean stage of the Delaware River at Phillipsburg was 5.4 feet, and the highest 9.9 feet on the 1st and 2d. At Trenton the mean stage was 3.3 feet, which was 0.7 foot above normal; the highest stage was 6.0 feet on the 2d.

Thunderstorms occurred on the 1st, 2d, 5th, 6th, 17th to the 21st inclusive, and 26th to the 30th, inclusive. Dense fog was observed on the 18th, to the 23d, inclusive. Solar halos were reported on the 3d, 8th and 29th and a lunar halo on the 29th. Killing frosts occurred over the northern part of the State on the 10th, 15th and 25th. Heavy frost was reported over north and central portions on the 10th, 13th and 14th, while light frost was general over central and southern districts on the 25th.

Light hail, with no material damage was reported at Layton on the 26th.

COMPARATIVE DATA FOR MAY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	57.3	90	29	2.74	5.20	1.18	......	......	......	......
1886	58.8	*87*	**36**	6.07	8.46	4.15	......	......	......	......
1887	63.3	94	35	1.37	3.82	*0.08*	......	......	9	6
1888	58.6	90	26	4.92	6.48	3.00	......	......	18	16
1889	62.3	94	32	4.09	6.60	2.43	......	......	11	12
1890	60.7	*87*	33	4.24	7.17	2.60	......	......	11	12
1891	59.5	93	28	2.97	5.39	1.78	9	11	11	9
1892	60.1	90	30	5.04	6.52	3.26	8	13	10	13
1893	59.4	95	29	4.07	6.38	2.55	13	8	10	10
1894	61.4	93	30	**7.72**	**15.61**	3.57	11	9	11	13
1895	60.9	**102**	28	2.85	3.95	1.66	12	12	7	8
1896	**65.3**	98	29	3.21	4.54	1.62	10	12	9	10
1897	60.6	*87*	29	5.68	9.11	1.71	11	12	8	12
1898	58.5	93	29	7.00	9.26	3.92	8	8	15	18
1899	61.1	94	29	1.92	3.15	1.15	12	12	7	9
1900	60.9	98	26	4.71	7.33	2.53	13	7	11	10
1901	58.6	90	29	5.60	8.13	3.10	9	9	13	16
1902	60.3	95	29	2.04	4.63	1.11	15	11	5	7
1903	62.7	98	*21*	*0.59*	*1.32*	*0.08*	16	10	5	4
1904	62.8	97	31	2.60	6.69	1.01	17	9	5	8
1905	61.4	89	22	1.71	3.94	0.42	12	11	8	8
1906	61.0	94	24	4.21	6.28	2.37	16	8	7	10
1907	55.4	91	22	5.05	8.09	2.51	12	9	10	12
1908	61.6	95	29	7.10	9.99	**4.39**	9	10	12	13
1909	60.0	91	27	2.30	4.84	0.79	10	11	10	9
1910	60.0	94	27	2.54	4.25	1.48	10	10	11	12
1911	64.5	99	22	1.37	3.84	0.31	14	11	6	7
1912	62.0	92	31	4.09	6.47	2.79	11	11	9	11
1913	60.3	94	25	3.45	4.86	2.53	15	7	9	9
1914	63.1	98	30	2.93	5.09	0.95	14	9	7	10
1915	58.1	88	30	3.82	6.15	2.00	13	7	11	13
1916	61.1	90	33	3.48	5.27	2.14	12	11	8	12
1917	*54.0*	90	25	3.83	6.83	2.08	10	10	11	11
1918	64.6	93	31	4.94	7.59	2.74	14	10	7	12
1919	60.9	95	31	4.98	7.68	3.06	14	6	11	12
1920	57.4	89	26	3.00	5.23	1.61	15	8	8	10
1921	60.2	96	32	4.17	6.44	2.60	14	7	10	10
1922	63.0	90	23	3.84	7.55	1.16	18	6	7	8
1923	59.1	90	25	1.66	3.62	0.67	20	6	5	6
1924	56.8	87	25	5.69	7.94	3.36	12	7	12	17
1925	57.7	99	23	2.86	4.94	0.49	13	11	7	8
1926	59.1	90	26	2.58	4.52	1.08	18	9	4	9
1927	58.1	88	30	3.65	8.16	1.93	9	10	12	13
1928	58.0	93	27	2.23	3.49	1.26	12	9	10	12

W. B. O. Philadelphia-6-21-28-810.

Climatological Data for May, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	59.4	−1.3	90	4†	33	10	49	2.44	−1.39	0.55	0	10	19	5	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	56.0	−1.5	88	4	28	10	50	1.79	−2.41	0.97	0	10	3	6	22	e.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	34	13	....	1.60	−2.03	0.50	0	11	18	5	8	e.	Brice E. Riker.
Dover	Morris	600	44	57.2	−1.4	88	4	33	10†	47	1.99	−1.95	......	0	11	8	13	10	......	William C. Harris.
Layton	Sussex	480	27	56.1	−1.9	92	4	27	10	52	2.18	−1.07	0.48	0	11	14	4	13	nw.	A. M. Depue.
Newton	Sussex	769	44	58.0^{b}	−1.5	88	4	35	15	46	§	....	......	0	10	15	5	11	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	59.0	−2.3	87	5	35	10	43	1.26	−2.60	0.34	0	7	17	11	3	......	Town Engineer.
Sussex	Sussex	442	33	56.8^{a}	−3.1	90	4	29	10†	53	2.04	−1.68	0.41	0	10	10	9	12	nw.	A. J. W. Mowatt.
Means and extremes	......	......	....	57.5	−1.9	92	4	27	10	53	1.90	−1.88	0.97	0	10	13	7	11	nw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	......	......	82	4	......	......	....	2.59	−1.37	0.90	0	13	15	8	8	se.	William Mann.
Boonton	Morris	400	§38	56.7	−2.5	85	4	31	10	46	1.48	−2.58	0.56	0	11	16	0	15	nw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	....	2.00	−1.50	0.73	0	12	18	5	8	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	59.0^{d}	−3.0	86	4	36	13	....	1.75	−2.07	0.72	0	13	17	8	6	ne.	Union County Park Com
Flemington	Hunterdon	140	§42	58.5	−2.8	87	4	35	14	41	3.22	−0.80	0.85	0	14	19	5	7	nw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	56.4^{b}	−2.9	78	4	33	14	40	2.46	−1.37	0.94	0	13	13	6	12	nw.	Charles J. Bates.
Jersey City	Hudson	10	30	59.6	−2.0	85	4	41	13	30	2.05	−1.53	0.80	0	12	8	12	11	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	58.2	−3.4	87	5	34	13	37	2.76	−1.26	......	0	13	14	4	13	w.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	57.6	−2.1	84	4	35	10†	44	1.62	−2.17	0.56	0	12	12	10	9	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	59.2	−1.2	87	4	36	13	39	1.91	−1.98	0.67	0	12	14	13	4	e.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	......	....	1.96	....	1.02	0	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	59.6	−1.9	88	4	39	14	37	1.70	−2.74	0.86	0	13	13	5	13	nw.	Marion T. Probert.
Plainfield	Union	120	40	57.2	−3.0	86	4	34	14	41	1.33	−2.59	0.55	0	11	7	14	10	s.	E. D. Pearson.
Ridgefield	Bergen	80	11	57.0	......	80	4	37	13	36	1.93	....	0.40	0	15	12	5	14	se.	George P. Kirsten.
Somerville	Somerset	70	45	57.8^{a}	−3.0	88	4	34	13†	43	2.27	−1.58	1.19	0	10	17	5	9	w.	Arthur Gerlich.
South Orange	Essex	200	58	58.9	−1.1	89	4	34	13	42	1.94	−1.62	0.90	0	13	10	13	8	w.	Everett W. Bird.
Verona	Essex	490	2	57.1	......	84	4	37	13	33	1.80	....	0.85	0	14	6	14	11	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	......	....	2.28	....	1.01	0	10	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	58.4	−2.2	80	4	41	13	26	1.98	−1.26	0.76	0	12	5	14	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	58.1	−2.4	89	4	31	10	46	2.06	−1.80	1.19	0	12	13	8	10	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	58.3^{l}	−2.8	86	4†	......	......	....	3.28	−0.54	0.93	0	11	....	....	....	......	Thomas J. Durell.
Bridgeton	Cumberland	90	47	59.2	−4.8	86	4†	34	14	41	2.93	−0.91	0.80	0	10	8	10	13	sw.	Paul T. Kornman.
Burlington	Burlington	12	§42	60.8	−1.1	93	5	41	3†	41	2.16	−2.05	0.69	0	12	12	10	9	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	59.8	−1.9	90	5	35	13	39	2.34	−0.99	0.72	0	11	6	16	9	nw.	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	
Hightstown	Mercer	120	34	58.2^{a}	−3.1	90	5	33	14	43	2.58	−1.37	0.60	0	8	11	11	9	sw.	Charles Welsh.
Imlaystown	Monmouth	115	37	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	59.4	−2.7	92	5	34	13	46	2.98	−0.26	0.64	0	12	11	12	8	e.	James M. Armstrong.
Lakewood	Ocean	54	24	57.6	−2.6	87	4	33	13†	43	2.75	−0.65	0.68	0	11	11	8	12	nw.	R. W. Holman.
Moorestown	Burlington	75	65	59.9^{b}	−1.4	93	5	35	13	....	2.39	−1.63	0.82	0	10	14	6	11	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	59.6	......	92	5	38	13	40	2.32	....	0.51	0	15	9	10	12	nw	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	....	2.85	−0.62	0.89	0	12	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	56.0	......	78	4	33	13	38	2.94	−0.32	0.79	0	14	17	6	8	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	......	......	88	4	......		....	2.22	....	0.37	0	11	13	15	3	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	59.8	−1.3	91	5	40	13	41	2.45	−1.07	0.68	0	12	8	9	14	nw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	57.1	−2.8	79	4	35	13	31	2.02	−1.72	0.72	0	12	13	2	16	ne.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	H. C. Himes
Philadelphia, Pa	......	117	57	62.4	−0.5	90	5	43	9	34	2.19	−1.07	0.92	0	13	8	9	14	n.	U. S. Weather Bureau.
Means and extremes	......	......	...	58.8	−2.4	93	5	33	13†	46	2.59	−1.01	0.93	0	12	11	10	10	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	56.4^{b}	−2.4	......	......	40	13	....	2.25	−1.33	0.80	0	11	17	10	4	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	56.4	−1.7	73	81	42	13	22	3.49	+0.44	1.26	0	15	8	14	9	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	58.0	−0.6	73	31	39	13	26	1.35	−1.64	0.37	0	10	9	9	13	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	54.8	−3.4	77	11	35	13	33	2.71	−1.05	0.77	0	12	8	10	13	s.	William D. Martin.
Sandy Hook	Monmouth	22	30	57.2	−1.3	76	4	43	9	25	1.91	−1.79	0.59	0	11	8	11	12	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	56.6	−1.9	77	11	35	13	33	2.34	−1.07	1.26	0	12	10	11	10	s.	
For the State	......	......	....	58.0	−2.2	93	5	27	10	53	2.23	−1.47	1.26	0	12	12	9	10	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for May, 1928

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						.23			.05		.17							.55	.26	.24	.36	.15					.30			.13		2.44
Charlotteburg	Passaic	.12					.07			T.		T.							.85	.12				.09			.14	.16	.12		.06	.06	1.79
Culvers Lake	Delaware	T.				.05						.01	T.						.36	.16	.08	.05	.02	.50			.05	.03	T.		.29		1.60
Dover	Passaic						.01			.05		.07							*	.87	.40			.01			*	.42	.02		.14		1.99
Layton	Delaware						.27					.03							.48	.10	.24		.02	.43			.30		.11	.01	.19		2.18
Newton	Delaware						.16					§							§	.20	.22	.18		.04			.08	.20			.22		§
Phillipsburg	...do					T.	T.			.10		.08							.34	.28	T.			T.			.05	.15			.26		1.26
Sussex	Hudson						.07					.07							.41	.16	.18		.07	.41			.30	.12			.25		2.04
The Red Sandstone Plain.																																	
Bayonne	Coast	.15					.01	*		.32		.20							.90	.03	.08			.02			.32	.18	.03		.35		2.59
Boonton‖‖	Passaic	.05						.04		.05	T		.08						.15	.56	.24	T.		.01			.04	.16	.10				1.48
Chatham ‖	...do						T.	.12		.15	.03		.16						.33	.73		.12		.03			.05	.13	.09			.06	2.00
Elizabeth	Coast	.07					.01	.03		.07	.10	.01							.72	.03	.08						.13	.34	.03		.13		1.75
Flemington	Raritan	T.					.03	.10		.30		.08	.05				T.		.55	.49	.11		.85	T.			.14	.41	.07	.01	.03		3.22
Highwood	Hackensack	.05					T.	.12		.22	T.	.08	.01					T.	.86	.10	.07			.10			.23	.15	.25		.22	T.	2.46
Jersey City	Coast	.03					T.	.01		.30		.08						T.	.80	.01	.10			.01			.27	.27	.03		.14	T.	2.05
Lambertville	Delaware	.02						.13		.37		*	.11					*	1.25	.24							.18	.26	.12	.04	.04		2.76
Little Falls.‖‖	Passaic	.09				.01		.12		.10	.02		.07						.28	.56	.13	.02		.03			.10	.06	.03				1.62
New Brunswick	Raritan	.04			T.			*		.29	.05	T.	.06					T.	.67	.13	.05	T.					.23	.32	.02	T.	.05		1.91
New Milford.**	Hackensack							.09		.08		.05							1.02	.05	.11						.18	.17	.01		.20		1.96
Paterson	Passaic	.02					.04	.05		.09		.04	.02						.86	.13	.09						.13	.02	.03		.14	.04	1.70
Plainfield	Raritan	.02					T	.12		.14		.11							.55	.06	.03			T.			.20	.05	.02		.03		1.33
Ridgefield	Hackensack	T.	.02				T.	.03		*	.10	*	.09					T.	.40	.36	.07		.01	.07			.24	.23	.03		.28		1.93
Somerville	Raritan							.07		.22		T.	.13						1.19	T.	.06	.09					.10	.19	.17		.05		2.27
South Orange	Rahway	T.						.17		.17	.03	.02	.02						.90	.04	.07						.21	.12	.07		.02	.10	1.94
Verona**	Passaic	.01				.02	.01	.12		.13		.10							.85	.05	.05			.03			.20	.06	.02		.15		1.80
Woodcliff Lake**	Hackensack						.04	.12		.16		.06							1.01	.26				.06			.23	.11			.23		2.28
New York, N. Y***	Coast	.03					T.	.01		.30		.09						T.	.75	.01	.10			.01			.25	.28	.02		.13	T.	1.98
The Southern Interior.																																	
Belleplain	Tuckahoe	.20					T.		*	.67			.09						.09	.15	.93						.29			.73	*	.22	3.28
Bridgeton	Coast	.31								.27									.13	.25	.70					.01	.80	.16		.16	.14		2.93
Burlington	Delaware	.02					T.	.06		.69	.01	.01	.15					T.	.03	.57	.06			T.			.30	.24			.02		2.16
Clayton	Delaware		.02					T.		.04	.02	T.	.13					T.	.17	.53	.10	T.		.02		T.	.72	.37			.22		2.34
Hammonton	Mullica																																
Hightstown	Raritan	.05					T.	T.		.60		T.							.57	.22	T.						.38	.11	.59		.06		2.58
Imlaystown	Delaware																																
Indian Mills	Mullica	.10					.05	.05		.52		.28	.20						.24	.54	.07			T.			.64	.22			.07		2.98
Lakewood	Metedeconk	.35					T.	.06		.68	.30	T.	.23						.25	.07							.28	.24	.04		.25		2.75
Moorestown	Delaware	.05					.03			.82		T.	.16						.02	.53	.02			T.			.47	.27			.02		2.39
Moorestown No. 2	Delaware	.02	.01				.04	.04		.49	.31		.15						.01	.51	.02	.01		.01			.43	.24	T.			.03	2.32
Northfield	Coast	.14	.02							.84			.07						.08	.12	.89			.01	.03		.15			.45	.05		2.85
Pleasantville‖‖	Coast	.16	T.					T.		.79	.31		.06						.03	.22	.72	.03			T.		.18	.04	.04	.25	.11		2.94
Runyon	...do	.03								.33	.07		.09						.33	.20	.04						.37	.14	.28		.34		2.22
Trenton***	Delaware	.31	T.			T.	.03	.04	T.	.48		.13	T.					T.	.58	.13	.05			T.			.27	.13	.04		.26	T.	2.45
Tuckerton	Coast	.12					.01			.72	.18		.17						.24	.12	.28					.01	.12				.02	.03	2.02
Vineland	Maurice																																
Phila., Pa***	Delaware	.03					.06	.01	.01	.91		.14	T.					T.	.12	.04	.04			T.			.28	.47	.06		.02		2.19
The Sea Coast.																																	
Asbury Park	Coast	.25						T.		.80	.30	.10	.15						.30	.10	T.						.06	.02	.02		.15		2.25
Atlantic City***	...do	.09	.14			T			.09	1.17	.02		.07					T.	.09	.14	.89	T.		.03		.05	.13	T.	.54	.03	.01		3.49
Cape May City	...do	.15					T.		T.	.37	.01		T.					T.	.24	.09	.05			T.		.10	.14		T.	.08	.12		1.35
Long Branch	...do	.16					.01	.03		.77		.16	.04					T.	.66	.05	.02			T.			.44	.33			.04		2.71
Sandy Hook***	...do	.01				.02	T.	T.	.26	.03	.16							T.	.57	.17	.10						.41	.08	T.		.10		1.91

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.92	30.46	14	29.50	26	13.9	45	ne	7	76	68	79	50
Long Branch	29.93	30.46	14	29.50	26					74	58	68	
Moorestown No. 2										72	51	65	
New York, N. Y	29.92	30.46	14	29.54	26	11.6	42	n.	12	63	53	65	54
Philadelphia, Pa	29.94	30.49	14	29.55	26	8.5	31	n.	12	72	60	64	62
Ridgefield	29.92	30.46	14	29.53	26								
Sandy Hook	29.91	30.45	14	29.52	26	10.2	37	sw.	1	74	63	74	57
Trenton	29.91	30.47	14	29.56	26	8.4	32	w.	1	70	54	63	59
Verona	29.92	30.46	14	29.55	26	5.6	23	nw.	12	64	46	62	

Daily Temperatures for May, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	72	73	80	90	90	78	67	69	63	82	74	63	63	72	77	78	69	71	66	70	82	70	70	70	70	71	68	74	72	70	76	72.9
	Minimum	48	40	39	45	51	46	44	37	43	33	54	41	35	34	36	47	52	53	56	55	58	56	54	39	35	45	49	64	49	53	46	46.0
Charlotteburg	Maximum	69	69	76	88	87	74	63	64	62	78	76	57	59	66	72	76	70	65	68	60	73	68	70	67	65	69	69	69	69	68	71	69.8
	Minimum	45	40	32	40	45	43	41	38	41	28	57	44	34	34	31	44	44	50	52	56	66	52	51	37	34	39	41	51	45	37	42	42.7
Dover	Maximum	70	68	78	88	78	69	63	62	61	80	75	62	63	70	74	79	68	61	58	61	75	67	70	65	66	69	63	71	70	67	73	69.2
	Minimum	49	43	37	45	49	45	43	41	42	33	53	44	33	35	36	50	51	53	55	58	58	53	49	40	36	42	47	54	48	42	43	45.2
Layton	Maximum	70	67	77	92	85	72	62	67	....	79	75	59	60	68	73	76	66	64	60	64	81	68	66	61	65	67	67	71	68	66	70	69.5[a]
	Minimum	48	36	32	40	49	45	39	28	39	27	54	42	29	34	31	44	50	51	57	65	55	57	53	39	31	39	41	51	49	40	39	42.7
Newton	Maximum	71	67	77	88	84	74	63	66	63	82	81	69	59	....	74	76	73	65	61	65	79	....	68	63	67	68	67	71	70	67	73	70.4[b]
	Minimum	52	45	40	48	50	43	41	37	41	36	53	39	36	....	35	50	50	62	50	55	53	54	49	40	39	43	48	51	49	45	45	45.6[a]
Phillipsburg	Maximum	71	71	80	85	87	71	66	65	61	78	74	62	63	70	76	76	70	71	64	68	77	69	70	64	68	71	66	72	70	69	73	70.9
	Minimum	49	42	39	46	53	47	46	41	42	35	52	47	38	36	38	48	54	56	58	56	59	57	51	42	38	46	49	53	51	46	48	47.2
Sussex	Maximum	71	68	76	90	84	72	68	67	63	82	75	59	60	68	75	79	74	64	61	64	80	70	67	....	67	69	66	72	69	65	75	70.7[a]
	Minimum	49	37	34	42	47	45	34	32	40	29	54	43	34	29	32	43	52	51	57	55	56	56	....	38	35	39	43	50	45	41	41	42.8[a]
The Red Sandstone Plain.																																	
Bayonne	Maximum	68	68	76	82	68	....	56	....	55	64	....	56	....	60	....	....	58	....	57	68	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	56	55	54	....	50	46	44	38	45	44	50	45	38	40	44	46	....	....	....	50	....	....	....	42	48	44	....	....	....	....	46	46.2[k]
Boonton§§	Maximum	69	68	77	85	80	68	63	66	61	77	76	61	60	69	71	77	65	60	60	64	77	70	69	64	65	68	65	70	72	68	72	68.9
	Minimum	48	47	39	44	45	47	44	42	41	31	45	41	35	37	34	47	47	52	52	53	53	53	51	40	41	42	45	52	47	42	41	44.5
Elizabeth	Maximum	68	70	79	86	78	73	69	65	59	....	77	65	....	70	71	70	74	64	....	65	79	71	....	69	....	....	70	70	70	72	....	71.0[g]
	Minimum	....	47	42	47	50	47	44	41	41	40	....	48	36	38	40	53	52	54	55	54	57	52	51	45	39	47	49	55	50	46	46	47.1[b]
Flemington	Maximum	73	72	80	87	80	70	63	60	60	77	72	62	61	70	75	78	70	66	64	64	78	74	70	66	67	71	66	72	73	69	77	70.5
	Minimum	51	44	40	46	49	48	46	37	40	37	50	46	36	35	36	49	52	55	55	54	58	55	52	44	38	43	49	54	50	45	47	46.5
Highwood	Maximum	71	69	77	78	71	68	60	61	59	76	60	61	61	70	71	73	66	60	61	62	71	65	64	65	68	68	63	67	70	69	74	67.1
	Minimum	50	43	46	45	48	49	43	37	40	36	....	45	35	33	38	....	50	53	54	53	57	....	54	44	38	....	49	55	49	46	45	45.7[d]
Jersey City	Maximum	70	70	79	85	74	67	64	62	59	77	72	62	62	70	70	76	65	60	61	63	70	66	71	67	66	68	61	70	72	72	74	68.5
	Minimum	52	52	50	55	51	48	44	47	43	47	53	47	41	43	52	57	55	54	54	54	55	51	51	50	46	51	54	55	55	55	51	50.7
Lambertville	Maximum	69	69	77	85	87	71	62	61	58	77	74	60	60	67	70	....	69	62	64	71	76	63	66	63	67	69	65	72	67	68	72	68.7[a]
	Minimum	53	47	46	52	50	47	44	39	39	42	51	45	34	38	45	54	56	55	54	58	52	52	53	41	41	46	50	53	52	42	50	47.8
Little Falls§§	Maximum	71	67	76	84	68	69	62	66	56	77	75	62	61	70	71	77	67	60	61	60	74	70	71	65	68	70	65	73	72	72	75	68.9
	Minimum	52	47	40	40	49	46	43	41	42	35	55	48	37	35	37	48	50	53	53	52	65	54	52	42	48	44	47	54	48	44	45	46.3
New Brunswick	Maximum	70	70	79	87	84	69	68	63	58	78	74	62	61	69	73	76	72	68	62	64	76	70	72	65	69	70	70	72	71	74	78	70.8
	Minimum	52	46	44	48	49	49	45	40	41	41	52	49	36	37	39	50	52	53	54	54	57	53	51	44	38	46	62	55	53	46	47	47.5
Paterson	Maximum	72	70	79	88	75	70	67	65	60	76	74	63	63	70	71	83	70	63	59	61	71	67	75	65	68	68	66	69	70	70	75	69.8
	Minimum	53	49	46	51	50	48	45	43	43	43	54	49	40	39	46	57	54	54	55	54	58	55	53	48	42	49	52	55	52	60	47	49.5
Plainfield	Maximum	72	71	80	86	75	69	64	62	59	77	72	63	63	70	70	77	65	61	61	63	70	66	70	67	66	68	63	70	72	72	74	69.0
	Minimum	46	42	39	47	47	49	44	36	38	36	47	47	36	34	39	47	50	62	57	54	55	53	50	42	36	44	49	50	49	44	45	45.3
Ridgefield	Maximum	69	67	77	80	70	68	61	62	58	75	72	62	60	69	71	74	66	60	58	60	73	65	67	64	69	70	63	68	70	68	74	67.4
	Minimum	50	46	42	48	48	47	43	38	40	39	51	41	37	38	40	49	53	54	52	52	55	53	48	45	41	48	52	55	60	48	46	46.7
Somerville	Maximum	....	....	82	88	78	73	65	61	60	76	71	61	62	69	75	75	65	65	62	64	76	70	70	65	68	69	66	72	70	72	72	69.7[b]
	Minimum	52	43	40	45	50	48	45	37	41	36	49	46	34	34	35	51	50	55	56	55	58	56	53	42	34	45	51	52	48	42	42	45.9
South Orange	Maximum	72	71	80	89	85	72	72	63	58	76	76	65	64	71	71	77	73	61	60	60	75	68	72	66	70	71	71	73	74	75	73	71.1
	Minimum	52	48	41	47	49	48	44	38	41	39	51	46	34	40	40	47	51	54	55	53	57	51	51	44	38	44	49	55	49	46	45	46.7
Verona	Maximum	69	66	76	84	72	65	58	61	57	73	73	58	58	66	68	73	64	59	58	61	72	66	68	63	65	66	64	68	69	69	70	66.4
	Minimum	52	48	46	54	48	47	43	42	40	40	52	46	37	39	43	64	54	53	53	52	55	52	51	43	41	46	52	54	52	48	46	47.8
New York, N. Y.	Maximum	66	67	75	80	68	66	59	61	58	74	71	59	58	67	67	71	64	59	60	62	69	64	66	62	63	65	61	67	70	68	72	65.8
	Minimum	53	52	52	56	51	48	44	48	43	48	53	44	41	45	53	68	65	54	54	54	53	50	51	50	46	51	54	55	56	56	52	51.0
The Southern Interior.																																	
Belleplain	Maximum	66	....	75	86	86	69	60	59	....	76	84	66	....	69	....	73	....	75	66	72	....	....	....	....	....	70	66	75	73	73	75	72.1[j]
	Minimum	49	39	41	46	48	50	46	39	40	....	51	....	31	31	33	....	43	54	62	53	....	....	....	....	30	....	50	48	48	52	50	44.5[h]
Bridgeton	Maximum	68	71	75	86	86	70	63	62	50	77	81	63	64	68	75	79	69	74	72	74	74	74	66	67	66	70	67	72	72	74	71	71.0
	Minimum	52	48	41	45	52	51	45	40	41	42	51	53	37	34	37	48	54	57	56	56	58	53	50	40	36	47	52	52	48	47	48	47.5
Burlington	Maximum	71	71	77	87	93	....	63	63	60	77	76	61	61	67	75	77	76	73	73	67	77	76	72	70	67	68	70	73	73	71	74	72.0[a]
	Minimum	55	46	41	46	52	50	44	42	42	42	52	48	46	47	61	52	52	56	57	55	57	55	52	46	41	48	52	55	53	48	54	49 6
Clayton	Maximum	71	69	75	87	90	70	63	61	54	71	81	65	64	68	74	80	71	73	69	75	77	78	69	66	65	69	67	73	69	72	72	71.2
	Minimum	48	54	45	48	53	49	47	41	41	43	51	50	35	40	38	55	49	57	54	56	58	54	51	45	39	47	52	51	47	51	50	48.4
Hightstown	Maximum	70	70	78	87	90	70	....	62	57	78	76	62	62	68	73	77	68	71	66	66	77	73	71	66	70	71	70	74	72	74	74	71.4[a]
	Minimum	....	48	38	44	48	46	42	36	41	39	52	43	34	33	36	41	49	55	54	54	51	53	51	41	36	43	51	53	52	46	44	45.1[a]
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	72	72	78	91	92	75	63	60	54	76	85	63	62	67	77	76	68	70	72	74	76	75	70	65	70	72	68	75	72	76	73	72.2
	Minimum	51	44	40	45	51	50	45	40	40	45	49	49	34	35	35	49	50	56	55	54	66	58	50	43	38	44	44	49	50	44	48	46.5
Lakewood	Maximum	73	71	78	87	81	74	64	58	52	70	78	63	63	68	75	72	65	70	65	65	71	68	68	68	69	70	69	72	73	74	74	69.9
	Minimum	49	42	37	44	47	50	45	39	40	44	46	47	33	33	38	47	45	53	52	51	54	52	50	43	36	44	47	50	54	45	46	45.3
Moorestown	Maximum	72	72	80	88	93	85	68	63	54	78	70	64	64	70	72	79	68	73	71	71	79	74	69	69	69	69	69	76	70	73	72	72.4
	Minimum	52	45	43	48	....	....	44	40	40	40	....	46	35	39	42	52	51	54	56	52	55	53	50	44	44	48	50	54	51	47	47	47.4[c]
Moorestown No. 2	Maximum	70	70	77	87	92	64	64	60	54	77	76	61	62	68	75	76	69	72	69	69	76	73	70	64	66	69	67	73	71	73	72	70.5
	Minimum	53	46	44	50	52	49	43	41	42	42	53	44	38	41	42	53	54	56	56	55	56	53	49	44	43	48	53	56	53	49	49	48.6
Pleasantville§§	Maximum	61	73	73	78	67	65	54	57	54	67	75	75	62	61	70	67	67	67	67	64	66	62	62	65	68	71	65	74	75	71	73	67.0
	Minimum	50	43	40	40	40	52	46	41	41	43	43	43	33	34	38	44	51	51	50	51	53	50	48	43	37	43	49	51	51	48	48	45.0
Runyon	Maximum	72	73	72	88	78	69	72	61	60	79	79	65	72	75	77	61	67	64	65	77	72	73	72	69	70	67	76	72	75	74	76	71.7
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	68	69	76	86	91	66	62	59	57	78	76	60	59	67	74	76	68	77	63	65	76	73	69	64	67	69	66	72	69	73	71	69.9
	Minimum	53	50	51	53	50	48	44	42	41	44	53	45	40	42	45	55	56	57	55	53	58	53	51	45	45	49	52	53	54	53	50	49.7
Tuckerton	Maximum	66	71	73	79	69	75	63	58	52	68	75	63	65	64	70	68	66	63	65	61	62	65	60	67	68	71	65	75	78	71	75	67.6
	Minimum	50	45	43	48	50	52	48	38	42	45	49	48	35	36	39	43	42	54	52	45	55	51	49	41	40	50	52	53	54	48	48	46.6
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	70	72	78	86	90	65	65	65	59	76	76	63	62	68	73	78	72	71	71	72	76	74	71	64	64	69	66	72	71	71	73	71.1
	Minimum	57	55	57	59	56	51	48	45	43	49	56	49	44	48	51	59	59	59	58	57	60	57	54	49	52	52	54	58	58	57	54	53.7
The Sea Coast.																																	
Asbury Park	Maximum	68	70	78	....	....	66	60	53	49	60	72	62	....	60	60	61	68	59	52	58	62	56	59	65	65	68	59	63	72	67	73	63.2[c]
	Minimum	49	48	48	50	50	52	47	47	44	46	52	51	40	43	46	52	52	53	53	52	53	50	50	48	43	53	52	54	58	52	51	49.6
Atlantic City	Maximum	65	72	62	71	63	63	56	51	48	64	64	63	63	57	61	60	58	59	55	59	61	56	56	63	63	70	62	63	73	66	73	61.9
	Minimum	49	50	51	56	54	53	48	45	44	48	53	47	42	46	46	55	54	54	52	53	51	49	49	48	50	53	55	56	58	58	54	51.0
Cape May City	Maximum	61	71	66	68	64	66	57	56	50	70	67	64	63	66	66	70	64	68	68	71	65	66	57	66	64	70	64	70	72	70	73	65.6
	Minimum	51	49	48	50	54	53	49	42	45	48	52	46	39	40	50	50	53	56	54	55	53	50	50	46	44	55	54	54	56	57	56	50.3
Long Branch	Maximum	66	67	76	73	68	63	51	52	54	66	77	60	62	52	60	60	57	56	57	58	68	60	56	55	66	62	58	59	74	72	62	62.2
	Minimum	50	47	43	47	49	51	42	45	41	44	50	50	35	38	42	50	50	51	52	51	52	53	49	48	38	47	50	52	55	49	48	47.4
Sandy Hook	Maximum	65	66	74	76	66	64	58	56	52	66	70	59	60	64	64	68	60	59	55	59	67	59	60	64	63	67	60	64	69	67	71	63.6
	Minimum	51	50	49	51	50	50	47	48	43	49	53	47	44	47	49	52	53	52	52	53	54	51	51	52	49	52	54	54	56	56	54	50.7

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.128	.208	.224	.208	.256	.160	.144	.182	.022	.192	.204	.272	.368	.224	.192	.224	.030	.092	.016	.110	.160	.192	.032	.160	.084	.168	.136	.218	.302	.096	.224	5.228
	Wind movement	92	51	62	91	92	155	109	139	100	58	86	123	86	92	75	72	57	54	70	49	106	44	38	50	45	65	48	55	44	43	53	2,304
Runyon	Evaporation	.090	.160	.200	.240	.240	.250	.250	.240	.090	.070	.140	.230	.205	.255	.260	.180	.010	.000	.040	.060	.150	.160	.240	.260	.130	.060	.120	.210	.160	.170	.160	5.030
	Wind movement	89	72	31	59	72	74	94	90	68	94	46	106	50	52	54	69	11	56	58	46	29	41	44	60	55	28	34	41	28	34	37	1,723

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

N NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. JUNE, 1928. No. 6

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Though higher than in June in 1926 and 1927, the mean monthly temperature was well below normal. The average increase over the temperatures of May, 1928, was 8.6°. Last year the difference between the two months was 7.3°. The highest observed temperature during the month, 93°, was lower than in any June since 1916. No station reported the occurrence of freezing weather. All stations except Cape May averaged below normal, the greatest departures being north of a line drawn from Trenton across to Asbury Park, approximately dividing the State into halves.

Mean total precipitation has been greater in June in two years in the record, which goes back to 1885. The latter of the these years was 1903; the other was 1887. A small area of deficiency as compared to normal appeared in the southeastern portion, very slight deficiencies occurring at Pleasantville and Atlantic City and one half an inch at Tuckerton. All totals of less than four inches are in the southern costal region, while all total exceeding eight inches are in the northern half of the State.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 36 stations, was 66.6°, which was 1.7° below normal. The highest temperature was 93° at Highstown and Indian Mills on the 14th. The lowest temperature, 36°, and the greatest daily range of temperature, 39°, both occurred at Charlotteburg on the 11th. The highest monthly mean temperature was 68.8° at Indian Mills, and the lowest, 63.8° at Long Branch.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +0.1°; Red Sandstone Plain, —0.4°; Southern Interior, —0.2°; Sea Coast, 0.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 6.75 inches, which was 2.96 inches above normal.

The greatest monthly precipitation was 10.34 inches, at Culvers Lake, and the least, 3.03 inches at Atlantic City. The greatest amount of precipitation in any 24 consecutive hours was 2.66 inches at Plainfield on the 18-19th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 15, or 5 more than normal.

The precipitation accumulated departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +1.60 inches; Red Sandstone Plain, +1.37 inches; Southern Interior, +0.68 inch; Sea Coast, —0.57 inch.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 1 mile below normal. The highest velocity, sunstained for 5 consecutive minutes, was 46 miles per hour from the northwest at Sandy Hook on the 14th. High winds also occurred on the 9th and 29th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 10, which was 3 less than normal; partly cloudy, 9, or 1 less than normal; cloudy, 11, or 4 more than normal. The per cent of possible sunshine was 51, which was 10 per cent below normal.

MISCELLANEOUS.

The mean stage of the Delaware River at Phillipsburg was 6.0 feet. The highest stage was 13.0 feet on the 30th. At Trenton the mean stage was 3.3 feet, which was 1.4 feet above normal. The highest stage was 6.0 feet on the 8th.

The mean atmospheric pressure, reduced to sea level, was 29.90 inches, which was 0.08 inch below normal. The highest reading was 30.22 inches at Verona on the 11th, and the lowest, 29.53 inches at Sandy Hook and Verona on the 6th.

Thunderstorms occurred on the 5th, 6th, 9th, 10th, 14th, 15th, 18th to 21st, inclusive, 23d to the 27th, inclusive, 29th and 30th. Dense fog was noted on the 12th, 13th, 14th and 24th. Solar halos were observed on the 3d, 8th, 11th, 12th and 30th and a lunar halo on the 24th. Light to moderate hail, with only slight damage was reported at Flemington, Somerville, New Brunswick, Paterson and Highwood on the 9th. Light hail, with no damage was also reported at Burlington on the 14th, Layton on the 26th, and Verona on the 30th.

COMPARATIVE DATA FOR JUNE

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	68.7	97	39	1.79	*3.37*	0.72	......	......	......	......
1886	67.1	91	41	3.38	5.79	2.22	......	......	......	......
1887	68.2	97	42	6.77	10.29	4.21	......	......	9	10
1888	70.8	99	39	2.59	5.69	1.67	......	......	5	6
1889	69.9	91	40	3.73	6.75	2.39	......	......	10	10
1890	70.7	95	42	3.59	5.16	0.99	11	13	6	7
1891	69.7	102	38	2.92	6.71	1.24	14	9	7	5
1892	72.4	98	**44**	3.85	6.12	1.58	10	12	8	11
1893	69.7	103	40	2.95	7.02	0.46	10	11	9	8
1894	70.6	102	35	2.28	5.90	0.99	14	11	5	9
1895	71.7	103	39	3.24	5.99	0.93	11	11	8	10
1896	68.1	96	37	5.46	13.45	2.64	12	10	8	10
1897	66.1	95	35	3.38	5.50	2.12	10	13	7	10
1898	70.1	100	38	2.10	3.54	1.13	14	12	4	8
1899	72.3	103	38	2.50	4.34	1.01	15	10	5	7
1900	70.4	97	39	3.08	4.91	1.10	12	12	6	8
1901	70.0	103	35	*1.57*	4.36	0.73	18	8	4	5
1902	67.5	99	37	6.57	10.21	**4.54**	14	11	5	11
1903	*64.0*	92	37	**7.68**	**15.02**	2.39	6	10	14	15
1904	68.6	100	34	3.13	5.44	1.91	13	10	7	12
1905	68.3	96	35	3.43	8.71	1.67	11	12	7	10
1906	70.4	98	38	4.48	9.18	1.45	11	11	8	12
1907	64.7	96	31	4.41	6.85	3.15	12	10	8	10
1908	69.9	99	35	2.32	4.63	0.77	16	12	2	4
1909	70.0	99	36	3.26	5.70	1.71	9	10	11	12
1910	66.9	95	34	5.17	8.01	2.66	9	10	11	13
1911	68.9	97	40	5.36	10.11	2.84	9	12	9	14
1912	68.0	98	33	1.94	3.61	0.91	9	12	9	8
1913	69.1	98	31	1.80	3.76	0.68	19	8	3	5
1914	68.5	98	35	2.66	4.85	1.09	16	9	6	7
1915	67.0	95	37	3.12	6.51	1.40	13	10	7	11
1916	64.7	*87*	36	4.20	5.99	2.22	10	9	11	13
1917	68.9	95	40	4.27	7.14	2.80	13	10	7	12
1918	66.3	96	32	3.43	6.21	1.35	15	9	6	8
1919	69.5	99	38	3.16	3.58	*0.37*	16	7	7	8
1920	68.4	98	38	6.18	11.26	3.12	13	9	8	12
1921	70.4	100	33	3.23	5.64	1.40	18	7	5	8
1922	71.1	95	39	6.31	11.50	2.97	12	9	9	15
1923	72.5	**106**	37	2.08	5.44	0.72	18	8	4	7
1924	66.8	95	*30*	4.20	7.32	1.72	11	11	8	13
1925	**73.6**	103	36	3.10	6.16	0.72	17	9	4	9
1926	64.9	97	31	2.60	4.73	1.29	12	9	9	11
1927	65.4	97	31	3.16	5.24	1.46	15	9	6	10
1928	66.6	93	36	6.75	10.34	3.03	10	9	11	15

W. B. O. Philadelphia-7-24-28-810.

Climatological Data for June, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	67.2	−1.6	92	14	44	11	35	6.52	+2.52	1.13	0	13	17	3	10	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	64.6^{a}	−0.2	89	14	36	11	39	7.25	+3.13	1.08	0	17	2	6	22	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	43	11	....	10.34	+5.73	1.68	0	19	14	6	10	s.	Brice E. Riker.
Dover	Morris	600	44	64.4^{b}	−2.3	89	14	41	11	34	7.38	+3.35	1.20	0	16	5	13	12	......	William C. Harris.
Layton	Sussex	480	27	63.9	−1.6	84	14†	37	11	37	9.22	+5.43	1.35	0	16	8	8	14	sw.	A. M. Depue.
Newton	Sussex	769	44	65.2	−2.8	87	14	42	11	32	7.77	+3.79	1.57	0	18	9	9	12	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	66.6	−2.7	90	14	45	11	33	§	....	......	0	13	16	8	6	......	Town Engineer.
Sussex	Sussex	442	33	64.0^{b}	−2.8	86	14	38	11	37	8.02	+4.34	1.40	0	16	11	6	13	w.	A. J. W. Mowatt.
Means and extremes	......	......	....	65.1	−2.0	92	14	36	11	39	8.07	+4.04	1.68	0	16	10	8	12	sw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	......	......	......	......	......	......	....	6.37	+2.59	1.25	0	12	11	9	10	s.	William Mann.
Boonton	Morris	400	§38	64.8	−2.8	87	14	41	11	34	7.42	+3.75	1.76	0	13	14	0	16	sw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	....	4.86	+0.80	0.78	0	12	19	6	5	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	67.9^{b}	−2.6	90	14	46	1†	33	6.11	+2.49	1.70	0	15	15	9	6	sw.	Union County Park Com
Flemington	Hunterdon	140	§42	67.5	−1.7	90	14	46	11	31	6.55	+2.71	1.61	0	16	16	4	10	sw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	65.4	−2.2	86	14	43	11	32	8.56	+4.87	1.76	0	14	12	3	15	sw.	Charles J. Bates.
Jersey City	Hudson	10	30	68.0	−2.9	89	14†	53	4†	29	6.24	+2.74	1.48	0	17	3	15	12	s.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	66.4	−3.3	88	14	45	11	28	7.50	+3.59	2.28	0	17	11	9	10	w.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	66.3	−1.7	91	14	43	11	35	6.58	+3.06	1.50	0	14	13	8	9	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	68.0	−1.1	89	14	47	11	29	7.18	+3.42	1.38	0	15	12	11	7	sw.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	......	....	7.76	....	1.50	0	14	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	67.8	−2.0	91	14	48	11	29	7.71	+3.59	......	0	15	12	6	12	sw.	Marion T. Probert.
Plainfield	Union	120	40	66 0	−2.6	89	14†	44	11	33	8.69	+4.95	2.66	0	16	7	14	9	sw.	E. D. Pearson.
Ridgefield	Bergen	80	11	66.1	......	88	14	46	11	29	7.14	....	1.25	0	15	9	10	11	s.	George P. Kirsten.
Somerville	Somerset	70	45	66.3	−2.8	90	14	44	1†	34	7.29	+3.55	1.80	0	15	19	3	8	w.	Arthur Gerlich.
South Orange	Essex	200	58	67.2^{b}	−1.3	90	14†	43	11	....	7.45	+3.90	1.17	0	12	11	11	8	w.	Everett W. Bird.
Verona	Essex	490	2	64.8	......	86	14	45	11	27	4.84	....	1.05	0	14	6	13	11	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	......	....	7.26	....	1.60	0	14	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	66.6	−2.2	85	25	53	6	27	6.12	+2.79	1.47	0	17	2	15	13	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	66.6	−2.2	91	14	41	11	35	6.97	+3.29	2.66	0	14	12	8	10	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	67.6	−1.1	89	14	40	17	38	3.57	+0.35	0.93	0	16	6	13	11	s.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§42	68.7	−1.0	91	14	50	11	29	6.91	+3.03	1.15	0	17	12	8	10	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	68.4^{b}	−1.1	90	14	49	16	30	6.77	+3.10	1.86	0	14	0	23	7	sw.	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	
Hightstown	Mercer	120	34	67.8	−1.2	93	14	45	11	33	7.54	+3.94	1.64	0	16	17	7	6	sw.	Charles Welsh.
Imlaystown	Monmouth	115	37	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	68.8	−1.0	93	14	45	17	37	6.74	+2.61	1.74	0	11	7	14	9	s.	James M. Armstrong.
Lakewood	Ocean	54	24	67.0	−0.5	87	14†	45	11	32	5.75	+2.04	0.97	0	17	11	7	12	sw.	R. W. Holman.
Moorestown	Burlington	75	65	68.3^{a}	−1.7	91	14	48	1	31	7.99	+4.27	1.40	0	11	12	7	11	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	68.2	......	89	14	51	11†	29	7.73	....	1.17	0	16	10	6	14	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	....	3.64	−0.03	0.84	0	12	....	....	....	......	William L. Flick.
Pleasantville‡‡††	Atlantic	26	30	66.1^{a}	......	84	6†	45	17	28	3.60	−0.33	0.97	0	12	15	6	9	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	......	......	91	14	40	11	....	6.89	....	1.03	0	13	15	9	6	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	67.8	−1.7	90	14	52	11	27	5.90	+2.41	1.82	0	15	4	9	17	sw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	67.3	−1.1	86	2†	47	17	32	3.33	−0.50	1.59	0	12	13	5	12	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	H. C. Himes
Philadelphia, Pa.	......	117	57	69.8	−1.6	88	14	57	23	23	6.77	+3.53	1.53	0	18	5	14	11	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	68.0	−1.2	93	14	40	11†	38	6.06	+2.12	1.86	0	14	10	10	10	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	65.6^{a}	−1.8	85	2†	52	17	29	6.98	+8.36	1.80	0	17	16	11	3	sw.	Information Bureau.
Atlantic City	Atlantic	16	55	66.0	−0.6	84	2	56	16	25	3.03	−0.01	0.76	0	14	6	16	8	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	68.0	+0.3	84	19	53	16	22	3.95	+0.91	1.42	0	14	4	14	12	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	63.8	−2.4	87	14	49	1†	28	8.34	+4.54	1.41	0	18	6	15	9	s.	William D. Martin.
Sandy Hook	Monmouth	22	30	66 6	−1.2	82	25	56	23	22	6.37	+2.41	1.40	0	16	6	12	12	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	66.0	−1.1	87	14	49	1†	29	5.73	+2.24	1.80	0	16	8	13	9	s.	
For the State	......	......	....	66.6	−1.7	93	14	36	11	39	6.75	+2.96	2.66	0	15	10	9	11	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for June, 1928

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		.05		.50	1.06	1.13	.25		.53					.55				T.	.53		.23	.33				.60	.05		.71			6.52
Charlotteburg	Passaic		.08		.13	1.08	.65			*	.78					.28				.70	.23	.09	.50	.02	.70		.12	.45		.75	.69		7.25
Culvers Lake	Delaware		.16		.71	1.22	.93	.01		1.64	T				.58	.05			T.	.89	.02	.32	.48	.04	.63	.03	.48	.26		1.68	.21		10.34
Dover	Passaic		.07		*	.87	.98			.90					.46				.23	.79		.50	.28	*	.67		.12	.06		1.20	.25		7.38
Layton	Delaware		.08		.87	1.09	.60			1.35					.71					.83	.02	.47	.34		.51	.05	.51	.59		.96	.24		9.22
Newton	Delaware		.10		.52	.90	.81	.01		.61	T.				.17	.02				1.57	.01	.40	.44		.36	.03	.18	.34		1.18	.12		7.77
Phillipsburg	...do																																
Sussex	Hudson		.14		.61	1.03	.82			1.40					.53	.04				1.29	.04	.36	.36		.31		.38	*		.57	.14		8.02
The Red Sandstone Plain.																																	
Bayonne	Coast		.05		.85	T.	1.25			.04	.65		T.		.34				.28	.70		.17	.24		.70	T.				1.10			6.37
Boonton ‖‖	Passaic	.06	.11			.74	.98	T.		.08	.67					1.76				.17	.72		.44	.28	.62	T.					.79		7.42
Chatham ‖	...do		.07			.63	.49			.10	.35					.40				.19	.78	T.	.25	.44	.42	.03					.71		4.86
Elizabeth	Coast		.05		.34	.06	1.70			.29	.25		T.			.56				1.10	.15	.14	.28	.01	.25					.48	.45		6.11
Flemington	Raritan		.05		.30	.40	1.61	T.		.96	.09		.03			.70			T.	.71	.03	.08	.31	T.	.41		.05			.51	.31		6.55
Highwood	Hackensack		.08		.27	.35	.99	T.		1.20	.07				.65	.32			T.	1.58	T.	.16	.34		.64					1.35	.56		8.56
Jersey City	Coast		.02		.50	.40	1.06	T.		.45	.06		.01		.29				T.	1.48	.02	.12	.20	.01	.60		.02			1.00			6.24
Lambertville	Delaware		.03		.31	.40	2.28			.39	.12				.91	.10			T.	.76	.03	.19	.40		.46		.05			.51	.56		7.50
Little Falls ‖‖	Passaic	.18	.10			.68	.98	.01		.05	.47					1.50				.31	.83		.34	.28	.31			T.			.54		6.58
New Brunswick	Raritan		.11		.27	.76	1.38	T.		.05	.94	T.	.05	T.	T.	.98			T.	.73	.15	.13	.35	T.	.33		T.			.57	.38		7.18
New Milford.**	Hackensack		.05		.31	.43	.31			1.07					.61				.46	1.50		.18	.31	.41		.08				.81	1.23		7.76
Paterson	Passaic		.10		.24	.54	.79	T.		.07	.57					.97				1.90	.04	.18	.43		.42			T.		.44	1.02		7.71
Plainfield	Raritan		.03		.30	.61	1.47	T.		.85	.30				.50	.18				2.66	.12	.12	.40	.01	.45		T.			.69	T.		8.69
Ridgefield	Hackensack		.04		*	.48	1.25	T.		.61					T.	.40			.20	1.21	.01	*	.45	*	.71		T			.68	1.10		7.14
Somerville	Raritan		.06		.30	.54	1.38			1.80	.11		.01			.41				.75	.07	.11	.32		.40					.39	.64		7.29
South Orange	Rahway				.24	.73	1.17			.30	.53					.54				1.00	1.08	.20	.60		.50					.56			7.45
Verona**	Passaic		.05		.51	.46	.59			.32					.32				.15	.66		.25	.36	.03	.44					.64	.06		4.84
Woodcliff Lake**	Hackensack	.09			.55	.70	.50			.71					1.45	.15			.10	1.14	.50	*	1.05		.27						.05		7.26
New York, N. Y***	Coast		.02	T.	.75	.54	.50	T.		.51	.04		.01		.35				.26	1.21	.01	.13	.21	.02	.55		.04			.97			6.12
The Southern Interior.																																	
Belleplain	Tuckahoe		.08		.14	.40	.24		T.		.71	.15	.02			.42				.21	.02	*	.21	.01	.03					.65	.28		3.57
Bridgeton	Coast																																
Burlington	Delaware		.03		.06	.38	.77	.13		.12	.94		.10		1.15	.59				.09	.46	.02	.86	T.	.65					.40	.16		6.91
Clayton	Delaware		.04		.05	.39	1.40	.04	.02	T.	1.86				.40	.85			.05	T.	T.		.47	T.	.05					.85	.30		6.77
Hammonton	Mullica																																
Hightstown	Raritan		.14		.19	.49	.97			.11	.66		.07		1.30	.34			T.	.42	.04	.06	.54	T.	.53					.96	.72		7.54
Imlaystown	Delaware																																
Indian Mills	Mullica		.26		T.	.91	.20	.30			1.74				T.	.32				.25		.11	.88		.20					1.57			6.74
Lakewood	Metedeconk		.15		.18	.45	.55	.04		.07	.93		.12		.20	.80				.11	.04	.03	.97		.11					.70	.30		5 75
Moorestown	Delaware		.03		.15	.55	.55				1.03					1.18				1.20		.05	1.40		.65					1.20			7.99
Moorestown No. 2.	Delaware		.04			.70	.54	.01		.07	1.02		.06			1.17				.08	1.10	T.	.88	.58	.30	.30			.01		.87		7.73
Northfield	Coast		.06		.09	.28	.25				.68	.12				.84					.36	.26	.10	T.						.20	.40		3.64
Pleasantville ‖‖	Coast		.04		.09	.51		.27			.97		.13			.78					.11		.10	.12							.48		3.60
Runyon	...do				.14	.75	1.01			.57	.40				.34	1.03				.99		.12	.35	.27						.50	.42		6.89
Trenton***	Delaware		.07	T.	.51	.71	.64		.14	.52	.02		.06		.69				.05	.65	T.	.10	.63	T.	.45		T.			.66	T.		5.90
Tuckerton	Coast		.14		.09	.78	.04				1.59	.02									.09	.14	.09	.03						.26	.06		3.33
Vineland	Maurice																																
Phila., Pa***	Delaware		.04		.42	.77	.40		.01	1.01	.01		.05		.42				.12	1.28		.05	1.48	.03	.06	.14	T.			.45	T.		6.77
The Sea Coast.																																	
Asbury Park	Coast		.03		.35	.48	1.27			.25	.50		.10		T.	1.80			T.	.60	.16	.04	.68	.02	.14					.35	.21		6.98
Atlantic City***	...do		.03	.01	.15	.49	.29	T.		.35	.17	.10		T.	.34					.03		.13	.08	T.			T.	T.		.74	.12		3.03
Cape May City	...do		T.	T.	.21	.35	.01	.06		.01	.83	1.42	T.		.14	.03				.05	.20	T.	.02	T.				T.		.39	.23		3.95
Long Branch	...do		.06		.40	1.10	1.41	T.		.75	.25		.10		1.25	.02			.20	.80	.18	.30	.20	.02	.87		T.			.40	.03		8.34
Sandy Hook***	...do		.05	T.	.57	.65	.44	.10		1.31	.09		.02		.71	T.			.19	.64	T.	.10	.22	T.	.34		.54			.40	T.		6.37

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.91	30.20	11	29.60	6	14.4	43	s.	29	84	74	81	48
Long Branch	29.91	30.20	11	29.58	6					80	63	78	
Moorestown No. 2										82	64	78	
New York, N. Y	29.90	30.20	11	29.55	6	12.6	51	nw.	14	78	62	71	43
Philadelphia, Pa	29.91	30.22	11	29.58	6	8.2	30	nw.	14	80	66	73	60
Ridgefield	29.90	30.21	11	29.55	6								
Sandy Hook	29.89	30.21	11	29.53	6	11.4	46	nw.	14	80	67	80	53
Trenton	29.89	30.20	11	29.54	6	8.4	31	nw.	14	76	60	72	52
Verona	29.90	30.22	11	29.53	6	5.2	21	nw.	9	75	59	74	

Daily Temperatures for June, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	80	83	73	71	63	82	76	80	83	72	78	81	81	92	76	80	83	79	76	75	71	65	63	83	89	87	81	86	83	81	....	78.4
	Minimum	45	55	49	55	54	56	54	47	59	54	44	49	57	67	57	45	48	54	63	60	58	55	54	68	66	65	61	57	65	68	....	56.0
Charlotteburg	Maximum	75	79	79	74	58	80	80	77	79	78	75	80	79	89	....	75	79	79	73	67	65	60	61	78	84	83	80	80	78	80	....	76.0^{a}
	Minimum	43	54	50	51	52	52	61	44	55	55	36	....	53	63	58	42	42	50	59	68	50	53	53	56	60	64	60	52	58	65	....	53.1^{a}
Dover	Maximum	76	79	75	67	58	80	72	78	79	70	69	80	74	89	76	78	81	77	65	67	62	58	59	....	86	84	79	82	77	79	....	74.3^{a}
	Minimum	46	60	50	53	53	....	55	48	57	55	41	50	56	57	54	45	47	55	60	58	53	54	54	57	....	66	62	66	63	64	....	54.6^{b}
Layton	Maximum	76	80	75	74	60	70	72	78	75	68	70	79	76	84	75	75	78	75	67	69	66	60	64	80	84	80	78	82	79	81	....	74.3
	Minimum	41	51	44	50	52	54	54	42	57	52	37	42	56	65	55	41	42	58	63	60	52	58	55	60	63	63	60	53	60	65	....	53.5
Newton	Maximum	80	83	76	68	58	81	74	78	79	70	70	79	76	87	73	75	79	77	71	69	64	61	64	80	83	83	79	82	79	80	....	75.3
	Minimum	48	58	48	53	51	53	52	50	56	55	42	48	58	64	58	44	57	55	60	58	53	53	53	57	65	63	58	55	62	64	....	55.0
Phillipsburg	Maximum	79	82	74	62	60	81	71	78	81	71	70	78	80	90	75	77	80	76	79	73	64	63	62	80	85	84	80	83	81	80	....	76.0
	Minimum	46	62	51	55	56	57	57	50	60	54	45	54	58	66	59	48	48	56	64	62	57	56	57	59	67	65	62	57	65	64	....	57.2
Sussex	Maximum	77	80	75	70	59	81	74	....	79	68	70	80	75	86	73	76	79	76	70	69	68	62	68	72	85	83	....	82	79	80	....	74.9^{b}
	Minimum	42	56	44	53	52	54	54	43	....	54	38	43	54	66	55	41	43	54	61	60	53	55	55	57	62	60	....	53	60	66	....	53.1^{b}
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	76	80	75	62	60	80	73	78	82	68	68	77	76	87	74	78	79	77	66	69	62	61	63	80	85	82	78	82	80	79	....	74.6
	Minimum	51	58	49	54	53	53	54	48	57	53	41	48	55	59	60	44	47	55	60	60	54	54	54	56	59	66	63	56	60	65	....	55.0
Elizabeth	Maximum	79	77	....	70	....	....	80	80	84	72	72	80	78	90	80	77	81	82	74	69	66	62	63	82	89	86	82	84	81	88	....	78.1^{c}
	Minimum	46	63	54	55	55	....	58	52	60	58	46	54	58	64	58	51	49	54	61	62	56	55	56	59	63	67	66	60	64	68	....	57.7^{a}
Flemington	Maximum	79	83	79	70	60	83	77	78	83	72	70	78	79	90	85	77	80	76	79	72	69	62	63	82	88	85	81	85	80	80	....	77.5
	Minimum	51	63	52	55	55	55	58	50	59	57	46	54	58	57	59	50	49	54	62	60	57	55	56	59	66	66	63	59	65	65	....	57.5
Highwood	Maximum	78	91	75	67	59	80	73	76	77	69	68	76	73	86	74	73	77	77	72	67	65	59	60	76	85	80	80	80	76	78	....	73.9
	Minimum	46	63	52	55	55	54	56	48	60	56	43	51	55	66	58	46	49	56	61	61	57	56	55	58	65	68	67	59	65	66	....	56.9
Jersey City	Maximum	78	84	75	66	62	82	73	79	83	71	70	78	75	89	78	73	80	81	75	69	64	68	62	81	89	84	82	84	82	86	....	76.8
	Minimum	55	64	57	53	54	53	59	56	60	57	54	55	62	63	60	56	56	59	60	60	56	55	54	59	65	69	68	65	64	68	....	59.2
Lambertville	Maximum	77	80	73	63	60	80	68	76	84	69	69	78	80	88	73	75	79	77	83	70	61	64	63	82	86	85	79	84	79	80	....	75.5
	Minimum	51	63	53	56	54	55	58	53	58	55	45	55	59	62	59	50	51	54	63	59	57	55	65	59	66	65	63	60	65	65	....	57.4
Little Falls§§	Maximum	79	79	77	65	61	83	74	79	82	72	67	81	77	91	77	78	81	80	66	68	63	61	68	83	87	86	81	85	81	83	....	76.5
	Minimum	44	61	52	57	54	53	56	49	59	58	43	51	56	60	58	46	48	54	61	60	55	55	55	66	63	67	65	58	62	68	....	56.1
New Brunswick	Maximum	78	83	80	74	61	83	80	76	85	....	71	78	79	89	81	75	78	81	79	71	68	61	65	80	87	88	84	84	82	81	....	78.0^{a}
	Minimum	51	64	53	56	55	55	58	52	60	56	47	56	59	64	60	50	49	54	62	60	58	55	55	59	66	67	66	61	63	68	....	58.0
Paterson	Maximum	80	83	78	71	59	81	77	79	82	73	70	80	75	91	81	75	80	80	75	69	65	60	62	78	87	85	81	84	78	82	....	76.7
	Minimum	51	64	56	54	55	54	59	54	61	58	48	54	60	65	58	....	52	57	63	61	58	55	55	59	65	68	67	63	66	65	....	58.8^{a}
Plainfield	Maximum	78	84	75	66	62	82	74	78	85	70	69	78	75	89	77	73	80	80	76	68	64	68	61	81	89	84	82	83	81	85	....	76.6
	Minimum	46	60	53	52	52	51	54	49	56	56	44	50	59	60	57	47	47	52	67	59	56	55	54	58	62	66	65	59	61	66	....	55.4
Ridgefield	Maximum	78	82	77	64	59	82	71	79	80	69	67	79	75	88	76	75	80	79	66	68	63	61	62	80	87	81	82	83	79	80	....	75.0
	Minimum	51	63	54	54	54	54	56	51	60	52	46	54	55	65	56	48	51	55	61	60	56	55	55	59	65	67	66	61	65	68	....	57.2
Somerville	Maximum	78	82	75	69	60	82	76	78	84	68	69	78	78	90	74	75	80	74	80	70	64	62	63	82	87	86	80	84	80	80	....	76.3
	Minimum	44	63	51	56	55	55	56	48	59	58	44	52	57	62	59	44	47	52	62	61	55	56	56	59	66	65	64	57	63	62	....	56.3
South Orange	Maximum	80	85	77	73	60	84	....	79	85	72	74	80	81	90	....	....	81	80	75	69	65	62	62	83	90	89	83	85	83	84	....	78.2^{c}
	Minimum	48	62	52	56	55	55	66	49	58	56	43	50	55	64	59	45	47	52	60	60	54	55	66	59	63	65	64	....	63	67	....	56.1^{a}
Verona	Maximum	74	79	71	60	58	80	70	74	79	66	67	75	73	86	72	71	76	77	65	66	63	59	60	77	83	81	77	79	76	79	....	72.4
	Minimum	50	62	54	54	53	53	58	61	58	56	45	54	58	64	59	48	50	56	61	59	55	54	54	58	65	66	66	60	64	67	....	57 1
New York, N. Y.	Maximum	73	79	72	65	61	80	71	75	76	67	67	74	75	82	73	73	79	80	70	68	63	63	61	80	85	80	77	81	76	82	....	73.6
	Minimum	56	64	57	54	54	53	60	57	60	57	55	56	62	64	60	57	57	59	60	60	56	55	54	60	65	69	68	66	64	68	....	59.6
The Southern Interior.																																	
Belleplain	Maximum	78	83	78	69	81	84	75	79	85	76	70	77	80	89	87	72	78	80	85	74	72	66	66	82	87	86	84	84	80	83	....	79.0
	Minimum	50	62	55	55	58	60	55	50	60	58	44	54	54	62	59	45	40	45	65	59	54	57	54	60	65	65	64	53	60	60	....	56.1
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	80	83	75	68	66	83	70	78	87	70	68	78	81	91	77	74	79	79	85	71	64	63	68	81	88	87	80	85	84	82	....	77.5
	Minimum	59	64	56	59	58	57	61	53	60	60	50	56	60	62	62	51	53	60	64	63	61	57	56	61	67	68	67	60	65	66	....	59.9
Clayton	Maximum	78	82	81	76	81	83	69	77	85	76	75	79	82	90	76	79	80	76	....	74	70	66	71	81	87	85	82	84	80	80	....	78.8^{a}
	Minimum	51	64	52	59	59	60	58	54	62	59	51	53	61	66	....	49	54	59	....	62	59	55	56	61	64	....	....	61	59	62	....	58.1^{d}
Hightstown	Maximum	80	84	79	72	67	84	75	80	87	78	70	77	80	93	76	77	80	82	83	74	68	65	67	80	92	88	87	86	82	84	....	79.2
	Minimum	50	63	51	52	55	65	57	48	58	53	45	56	55	64	59	46	47	54	62	60	54	56	55	60	66	62	62	58	64	64	....	56.4
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	82	84	82	69	75	85	73	79	88	78	64	80	81	93	83	76	82	81	87	70	70	63	70	82	88	86	83	87	80	82	....	79.4
	Minimum	47	63	55	58	58	57	57	52	61	58	49	57	58	65	60	50	45	50	65	61	58	57	55	61	64	68	65	60	65	69	....	58.3
Lakewood	Maximum	81	84	83	65	61	84	72	78	85	74	67	75	79	87	77	73	78	80	85	69	68	61	66	84	87	85	85	82	81	83	....	77.3
	Minimum	49	62	52	56	56	55	57	49	58	57	45	55	55	63	59	46	46	50	64	59	59	55	54	60	63	62	66	60	63	67	....	56.7
Moorestown	Maximum	79	84	78	69	70	84	73	79	86	76	69	78	81	91	77	75	80	83	85	72	70	69	70	80	88	85	81	85	80	80	....	78.6
	Minimum	48	63	53	58	56	55	59	53	57	57	49	55	65	63	59	50	50	....	65	60	60	55	54	60	65	....	63	65	63	65	....	58.0^{b}
Moorestown No. 2	Maximum	79	84	76	66	69	83	71	78	86	71	66	77	81	89	77	75	80	78	83	71	64	64	68	81	87	85	80	84	80	81	....	77.1
	Minimum	52	64	55	59	58	58	61	54	61	56	51	56	62	64	58	51	51	54	63	61	58	57	56	63	67	68	65	61	64	67	....	59.2
Pleasantville§§	Maximum	73	83	71	71	79	84	74	75	75	73	63	72	72	83	80	69	73	75	84	71	66	64	72	81	81	80	83	80	75	82	....	75.5
	Minimum	49	60	58	55	58	58	56	52	61	58	47	55	55	55	55	49	45	51	....	....	60	58	55	57	64	64	65	60	63	61	....	56.7^{b}
Runyon	Maximum	80	84	80	70	64	84	....	82	87	78	74	78	76	91	84	78	81	82	78	71	70	67	....	....	88	88	88	88	81	87	....	80.0^{c}
	Minimum	....	....	48	46	52	54	52	52	....	....	40	....	....	....	....	41	41	48	61	59	51	53	50	....	....	66	61	64	62	61	....	53.1^{j}
Trenton	Maximum	76	81	73	69	62	82	69	77	84	69	70	78	79	90	76	74	80	79	82	70	63	63	65	80	87	85	79	83	80	80	....	76.2
	Minimum	54	64	58	57	66	55	59	55	61	57	52	57	61	66	58	53	55	57	62	61	57	56	65	61	67	68	66	64	65	64	....	59.4
Tuckerton	Maximum	76	86	78	68	72	85	78	77	76	74	65	71	75	85	80	71	75	75	86	80	68	66	65	83	82	82	85	81	76	81	....	76.7
	Minimum	50	54	58	57	58	59	57	51	60	58	49	55	59	62	61	50	47	52	64	69	59	57	55	61	65	66	63	61	65	66	....	57.9
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	77	83	77	68	72	82	72	77	85	71	68	76	81	88	78	76	77	78	82	74	67	66	68	80	87	84	80	83	80	79	....	77.2
	Minimum	60	65	60	60	60	59	62	60	63	62	58	58	65	68	63	57	58	60	65	63	60	59	57	63	68	69	67	67	65	68	....	62.3
The Sea Coast.																																	
Asbury Park	Maximum	75	85	76	64	60	85	72	74	....	70	69	74	72	....	72	72	76	71	67	66	65	62	64	72	82	72	82	78	69	76	....	72.2^{b}
	Minimum	53	60	59	58	57	56	60	56	60	60	53	58	61	60	60	59	52	56	56	60	58	57	56	62	64	65	63	64	64	61	....	58.9
Atlantic City	Maximum	68	84	68	63	72	73	74	71	70	74	62	68	71	73	82	67	71	70	81	66	66	61	65	76	74	74	79	74	71	77	....	71.5
	Minimum	57	59	57	57	58	58	61	57	61	62	58	58	59	62	61	56	58	61	63	61	60	58	57	64	66	66	67	66	66	64	....	60.6
Cape May City	Maximum	79	83	72	65	82	82	74	75	73	73	62	73	74	75	80	73	74	73	84	78	72	67	69	82	78	76	82	78	76	82	....	75.5
	Minimum	58	62	57	57	63	63	62	57	61	58	56	58	60	62	58	53	54	59	64	60	60	58	58	64	65	65	67	64	66	67	....	60.5
Long Branch	Maximum	66	80	68	62	57	83	65	63	72	66	60	75	66	87	77	63	70	67	69	64	62	59	61	77	80	73	75	72	73	80	....	69.7
	Minimum	49	62	58	57	55	55	59	52	60	54	49	56	60	63	60	56	49	54	61	59	57	56	55	56	63	67	66	61	64	66	....	58.0
Sandy Hook	Maximum	76	79	71	65	58	78	69	76	76	68	67	71	72	79	73	68	77	75	75	68	62	60	62	74	82	78	79	79	75	79	....	72.4
	Minimum	56	64	59	56	56	56	61	58	61	60	57	58	63	63	62	59	57	60	61	61	58	58	56	62	66	68	68	65	66	67	....	60.7

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.200	.208	.250	.094	.096	.222	.208	.224	.234	.320	.226	.160	.224	.300	.304	.256	.272	.224	.270	.096	.068	.040	.048	.192	.304	.224	.304	.208	.128	.192	....	6.096
	Wind movement	61	85	48	56	65	78	47	65	62	67	39	50	42	*	119	58	48	81	89	48	83	76	53	51	83	57	32	65	82	96	....	1,885
Runyon	Evaporation	.210	.210	.210	.140	.070	.030	.200	.180	.090	.100	.240	.250	.245	.090	.080	.200	.210	.240	.090	.060	.120	.050	.070	*	.210	.250	.250	.260	.200	.070	....	4.575
	Wind movement	66	70	30	38	46	17	110	62	44	34	22	83	23	30	29	41	13	57	38	42	34	86	40	*	55	44	47	22	37	31	....	1,194

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. JULY, 1928. No. 7

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

July averaged warmer through New Jersey than any other July since that of 1921, but higher mean temperatures have not infrequently been recorded in earlier years. No maximum temperature as high as 97° was observed at any of the stations. Temperature conditions, while trying, were not very much out of the ordinary.

Precipitation was heavy, the average amount having been greater in only five earlier Julys in the 43 covered by the records. Heaviest rainfall for the month was through northern sections of the State, while a few stations in the southern part reported totals that were below normal.

What little hail fell was light, and no reports of damage by high winds were received, except at Trentonwhere a woman was reported injured on July 4th through through the falling of a pole of a large tent in a thunderstorm which produced a maximum wind velocity of 34 miles.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 74.2°, which was 0.8° above normal. The highest temperature was 96° at several stations on the 8th and 9th, and the lowest, 41°, at Charlotteburg on the 30th. The greatest daily range of temperature was 41° at Belleplain on the 31st. The highest monthly mean temperature was 76.8° at Jersey City, and the lowest, 72.1° at Atlantic City.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +0.3°; Red Sandstone Plain, —0.2°; Southern Interior, —0.2°; Sea Coast, +0.1°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 6.86 inches, which was 2.05 inches above normal.

The greatest monthly precipitation was 10.22 inches, at Dover, and the least, 2.21 inches at Moorestown. The greatest amount of precipitation in any 24 consecutive hours was 5.32 inches at Plainfield on the 5-6th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 12, or 2 more than normal.

The precipitation accumulated departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +4.51 inches; Red Sandstone Plain, +4.44 inches; Southern Interior, +1.30 inches; Sea Coast, +0.79 inch.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 9 miles per hour, which was normal. The highest velocity, sunstained for 5 consecutive minutes, was 41 miles per hour from the north at Sandy Hook on the 6th. High winds also occurred on the 4th, 5th, 14th and 20th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 16, which was 3 more than normal; partly cloudy, 8, or 3 less than normal; cloudy, 7, or normal. The per cent of possible sunshine was 67, which was 4 per cent above normal.

MISCELLANEOUS.

The mean stage of the Delaware River at Phillipsburg was 6.8 feet, and the highest stage, 16.0 feet on the 1st. At Trenton the mean stage was 3.7 feet, which was 2.4 feet above normal. The highest stage, 7.1 feet, occurred on the 2d.

The mean atmospheric pressure, reduced to sea level, was 29.97 inches, which was 0.01 inch below normal. The highest reading was 30.29 inches on the 31st, at Ridgefield and Verona, and the lowest 29.65 inches on the 6th at Atlantic City.

SEP 7 1928
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Thunderstorms oecurred on the 1st, 2d, 4th to 6th inclusive, 9th to the 16th, inclusive, 19th to the 24th, inclusive, and 26th to the 28th inclusive. Solar halos were observed on the 19th and 27th. Dense fog was noted on the 15th and 16th. Auroras were observed on the 7th, 8th and 13th.

ERRATA.

March 1926. Cape May City, mean temperature, 38.8° should be 38.6°; departure —2.0° should be —2.2°. Greatest daily range, 35° should be 28°. Monthly precipitation, 1.52 inches should be 1.84 inches. Departure, —2.21 inches should be —1.89 inches. Snowfall, Trace should be 0.7 inch. Number days with 0.01 inch or more precipitation 7, should be 9.

Burlington, greatest precipitation in 24 consecutive hours, 0.70 inch should be 0.80 inch.

May, 1926. Highwood, greatest precipitation in 24 consecutive hours, 0.66 inch should be 0.70 inch.

June 1926. Bergen Point, precipitation on June 23d, 1.91 inches should be 0.91 inches.

August 1926. Atlantic City, greatest precipitation in 24 consecutive hours, 2.19 inches should be 2.13 inches.

September 1926. Imlaystown, total precipitation, 2.79 inches should be 2.85 inches. Departure, —1.03 inches should be —0.97 inch. Number days with 0.01 inch or more precipitation, 9 should be 10.

November 1926. Sussex, number days with 0.01 inch or more precipitation, 15 should be 12.

COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	75.2	100	44	3.50	7.28	1.29	......	......	......	......
1886	73.0	98	48	4.91	7.95	2.98	......	......	......	......
1887	77.1	102	**54**	7.67	15.29	1.95	......	......	......	11
1888	71.1	95	45	3.50	7.03	1.25	......	......	8	9
1889	73.4	95	48	10.19	18.58	4.66	......	......	13	14
1890	72.5	101	39	5.62	7.55	3.60	12	11	8	9
1891	*70.1*	95	43	5.30	9.41	3.03	10	11	10	12
1892	74.3	105	44	4.03	7.96	2.38	12	14	5	8
1893	73.9	102	40	2.72	4.63	1.26	14	13	4	8
1894	75.7	106	44	1.66	5.00	*0.15*	14	12	5	6
1895	70.9	99	41	4.26	7.73	1.53	12	12	7	10
1896	75.0	98	47	5.50	13.29	2.45	13	10	8	13
1897	74.1	102	50	**11.42**	**20.80**	**6.11**	10	11	10	15
1898	75.3	**107**	38	4.96	11.72	2.23	11	13	7	10
1899	74.7	98	38	5.75	9.02	3.34	13	11	7	11
1900	75.9	104	42	4.74	7.21	1.11	15	12	4	11
1901	**77.3**	**107**	45	5.87	10.92	1.89	9	13	9	14
1902	73.0	100	43	4.78	9.92	1.83	10	12	9	13
1903	73.3	100	38	5.51	10.14	3.08	16	10	5	12
1904	72.3	98	42	4.87	8.06	2.41	13	10	8	13
1905	74.4	102	42	4.06	8.19	1.67	12	13	6	12
1906	72.8	*94*	46	5.58	13.25	3.44	11	14	6	12
1907	73.6	96	40	2.62	6.42	0.95	8	12	11	8
1908	75.6	106	42	4.70	8.12	1.97	12	13	6	9
1909	71.6	99	*36*	2.12	*4.03*	1.03	14	14	3	5
1910	75.3	99	42	*1.36*	5.33	0.22	12	12	7	5
1911	76.0	104	42	3.64	6.46	2.06	12	12	7	8
1912	73.7	100	*36*	3.86	9.91	1.01	14	10	7	9
1913	74.4	100	41	2.52	4.72	1.50	20	9	2	8
1914	71.5	97	40	6.05	8.57	1.94	9	11	11	15
1915	72.8	98	44	5.31	11.06	2.23	10	13	8	14
1916	74.4	97	45	5.40	9.01	3.15	11	9	11	12
1917	74.2	104	46	4.83	7.93	2.38	10	11	10	12
1918	72.2	104	39	3.93	13.60	1.20	17	9	5	8
1919	73.5	103	43	8.39	14.14	4.45	14	7	10	14
1920	71.7	96	42	5.76	16 25	1.20	17	10	4	11
1921	76.5	99	43	3.62	7.36	1.66	14	9	8	10
1922	73.0	98	44	5.79	9.26	2.29	13	9	9	13
1923	71.9	102	40	3.88	6.28	0.93	15	8	8	11
1924	71.6	98	41	2.59	5.08	0.84	19	8	4	6
1925	72.0	99	39	7.37	10.09	4.03	15	9	7	13
1926	73.0	105	40	5.46	8.51	1.29	16	7	8	12
1927	72.7	99	*36*	6.06	9.34	2.95	13	10	8	11
1928	74.2	96	41	6.86	10.22	2.21	16	8	7	12

W. B. O. Philadelphia 8-28-28-810.

Climatological Data for July, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr: Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Precipitation in inches: Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	No. of days: Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy	Prevailing direction of wind	Observers
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	75.6	+2.4	96	8†	50	30†	36	8.91	+3.93	1.86	0	14	22	3	6	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	72.2	+2.2	94	8	41	30	36	6.32	+1.49	2.05	0	14	1	24	6	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	48	30	....	7.05	+2.48	2.56	0	13	19	5	7	e.	Brice E. Riker.
Dover	Morris	600	44	73.4	+2.0	95	8	48	30†	38	10.22	+4.95	2.83	0	13	5	18	8	......	William C. Harris.
Layton	Sussex	480	27	72.2	+1.3	94	8	45	31	35	7.55	+3.29	3.50	0	13	16	3	12	sw.	A. M. Depue.
Newton	Sussex	769	44	72.7	+0.2	91	8†	49	30†	32	7.47	+2.51	2.10	0	13	14	10	7	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	74.3	+0.2	94	8	51	30†	32	6.55	+1.70	2.41	0	11	16	11	4	......	Town Engineer.
Sussex	Sussex	442	33	73.2^{e}	+1.1	93	8	......	......	....	§	......	3.04	......	12	....	....	....	......	A. J. W. Mowatt
Means and extremes	......	......	....	73.4	+1.3	96	8†	41	30	38	7.72	+2.91	3.50	0	13	13	11	7	sw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	......	......	......	......	......	......	....	7.47	+2.86	3.10	0	11	18	6	7	s.	William Mann.
Boonton	Morris	400	§38	73.5	+1.0	93	8	47	31	33	8.24	+3.34	2.41	0	14	20	0	11	sw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	....	8.53	+4.09	3.72	0	10	22	6	3	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	75.7	+0.4	94	8†	52	30	32	8.79	+3.63	3.96	0	14	24	4	3	sw.	Union County Park Com.
Flemington	Hunterdon	140	§42	75.2	+0.6	93	8†	51	31	32	6.36	+1.14	1.37	0	13	19	6	6	sw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	72.6	+0.3	90	4†	50	30†	29	9.10	+4.15	3.68	0	13	15	7	9	nw.	Charles J. Bates.
Jersey City	Hudson	10	30	76.8	+0.7	96	9	61	7	30	7.78	+3.34	2.85	0	13	12	12	7	s.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	74.4^{b}	+0.1	92	5†	54	30†	29	6.69	+1.87	1.42	0	13	19	6	6	w.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	74.9	+1.1	95	8	50	31	33	10.08	+5.69	4.24	0	14	14	10	7	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	75.7	+1.7	93	4†	53	30†	30	8.66	+3.62	3.14	0	14	16	12	3	s.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	......	....	8.67	......	3.27	0	12	....	....	....	......	Hackensack Water Co.
Paterson	Passaic	80	57	75.2	+0.8	94	8†	55	30	28	7.91	+2.89	3.60	0	13	20	4	7	sw.	Marion T. Probert.
Plainfield	Union	120	40	74.9	+0.9	96	9	50	30†	35	9.72	+3.89	5.32	0	13	11	14	6	sw.	E. D. Pearson.
Ridgefield	Bergen	80	11	74.4	......	95	8	51	31	32	7.64	......	3.05	0	16	16	9	6	s.	George P. Kirsten.
Somerville	Somerset	70	45	74.4	+0.3	94	9	50	30†	32	4.50	−0.61	1.20	0	14	19	6	6	w.	Arthur Gerlich.
South Orange	Essex	200	58	75.1^{d}	+1.9	96	9	49	30	34	§	......	4.00	0	....	17	9	5	w.	Everett W. Bird.
Verona	Essex	490	2	72.6	......	89	8†	52	30†	26	9.05	......	4.04	0	14	17	3	11	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	......	....	8.39	......	2.61	0	11	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	75.0	+1.2	92	9	61	7	27	7.72	+3.48	2.86	0	14	6	14	11	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.7	+0.8	96	9	47	31	35	8.09	+3.07	5.32	0	13	17	7	7	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	73.8	0.0	95	20	42	31	41	3.30	−0.81	......	0	9	16	9	6	w.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§42	76.0	+1.0	94	4†	52	31	31	6.38	+1.64	1.31	0	10	14	10	7	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	75.4	+0.4	92	4†	52	31	33	5.37	+0.52	1.72	0	11	8	17	6	sw.	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Charles Welsh.
Hightstown	Mercer	120	34	74.9	+0.5	94	9	51	30	32	9.46	+4.47	2.44	0	11	20	5	6	sw.	Frank M. Lawrence.
Imlaystown	Monmouth	115	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	James M. Armstrong.
Indian Mills‡‡	Burlington	76	39	75.4	+0.7	95	4	48	31	37	4.89	+0.23	1.85	0	11	15	10	6	sw.	
Lakewood	Ocean	54	24	74.0	+1.2	92	4†	49	31	33	7.02	+2.17	2.95	0	12	18	6	7	sw.	R. W. Holman.
Moorestown	Burlington	75	65	74.7	0.0	93	9†	52	31	53	2.21	−2.47	0.77	0	9	21	5	5	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	75.0	......	92	9	53	31	30	2.58	......	0.81	0	10	16	4	11	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	....	3.34	−0.26	1.01	0	9	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	72.6	......	92	20	46	31	35	3.97	−0.01	0.80	0	9	23	4	4	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	73.8	......	94	9	45	30	37	9.37	......	3.00	0	13	14	13	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	75.4	+0.9	93	9	59	30	28	7.17	+2.40	2.27	0	14	13	7	11	sw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	73.5	−0.6	95	20	50	31	34	2.81	−1.07	0.99	0	13	16	7	8	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	H. C. Himes
Philadelphia, Pa	......	117	57	77.4	+1.2	93	20	64	29	23	3.60	−0.55	1.02	0	11	12	11	8	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	74.5	+0.4	95	4†	42	31	41	5.22	+0.62	3.00	0	11	16	8	7	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	74.1	+1.7	90	4	57	30	26	5.36	+0.82	2.16	0	11	21	7	3	sw.	Information Bureau.
Atlantic City	Atlantic	16	55	72.1	0.0	88	28	61	7	22	3.40	−0.53	1.39	0	11	15	10	6	sw.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	73.1	−0.3	92	20	58	31	24	4.99	+1.21	2.05	0	10	12	12	7	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	72.8	+0.7	92	8	53	31	32	6.60	+1.68	2.33	0	13	17	10	4	s.	William D. Martin.
Sandy Hook	Monmouth	22	30	74.9	+1.2	90	8	63	21	25	8.42	+3.63	3.26	0	12	13	7	11	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.4	+0.7	92	8†	53	31	32	5.75	+1.36	3.26	0	11	16	9	6	sw.	
For the State	......	......	....	74.2	+0.8	96	8†	41	30	41	6.86	+2.05	5.32	0	12	16	8	7	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood: Indian Mills is Atsion: New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for July, 1928

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware				.34	1.75	.70				.52	.12	.07	.80	1.86	T.	T.				.15		.04	1.26		T.	.07	.13	1.10				8.91
Charlotteburg	Passaic	.09				.25	2.05				.03		.01	.29	.95						.09			.80	.03			.29	1.44				6.32
Culvers Lake	Delaware				.03	.83	.34				.47	.02	.01	.73	2.56	T.	T.			T.	.02		.13	.02				1.04	.85				7.05
Dover	Passaic				.35	1.00	1.83				.06	.42	*	.85	1.03		.53			T.			1.65	.26				*	2.24				10.22
Layton	Delaware				.03	2.87	.63				.70	.04		.53	1.27	.26						.01	.23	.13				.70	.15				7.55
Newton	Delaware				.10	.70	.62				.15	.09	T.	.86	2.10						.03		.11	.96	.04			.42	1.29				7.47
Phillipsburg	do				.06	2.28	.13				.09	.07	.35	.39	1.92								T.	.05				.75	.46				6.55
Sussex	Hudson					3.04	.99				.17		.08	.51	1.86			T.			.59		.62	.22	.22			§	§				§
The Red Sandstone Plain.																																	
Bayonne	Coast	T.	T.		.50	3.10					1.05	.05	1.07	.45	.07						.02	T.	T.	.09				.22	.85				7.47
Boonton ‖‖	Passaic	.63		.28		.04	2.41	T.			T.	.05	.07	.71	.28	.60		.05				.40	T.	.73	.28				1.71				8.24
Chatham ‖	do	T.				.22	3.72	T.				.25	.11	1.50	.37	.43							T.	1.14				.12	.67				8.53
Elizabeth	Coast		.18		.69	2.04	1.92			.01	.78		.09	1.12	.20								.01	.29	.02			.35	1.09				8.79
Flemington	Raritan	T.			.35	.51	.49				.05		.87	.95	1.37						.02		.05	.06	.27		T.	.07	1.30				6.36
Highwood	Hackensack	.15			.04	.73	2.95				1.84		T.	1.07	.10		T.	T.			.82		.08	.37	.04			.16	.75				9.10
Jersey City	Coast				.06	1.30	1.55				.90	.01	1.02	.70	.20		T.				.20		.04	.72			T	.30	.78				7.78
Lambertville	Delaware		T.		.10	.48	.64				.09		.54	1.34	.50						.56		.08	.38	.47			.09	1.42				6.69
Little Falls ‖‖	Passaic	1.43				.03	4.24					.09		1.83	.27	.25		.02				.46	T.	.39	.05			.02	1.00				10.08
New Brunswick	Raritan	T.	.05	T.	.72	1.18	1.96			T.	.07	.02	.02	2.13	.17						.12	T.	T.	.17	.06			.03	1.96				8.66
New Milford.**	Hackensack				.13	.99	2.28				1.54		.35	1.18	.09						.75		.47	.03				.32	.54				8.67
Paterson	Passaic	T.			.18	.74	2.86				.20		T.	1.60	.20		.08				.50		.20	.24	.06			.07	.98				7.91
Plainfield	Raritan				.29	4.54	.78				.39	.12	.12	2.10	.19					T.	T.		.01	.07			.21	T.	.90				9.72
Ridgefield	Hackensack	T.	.02		.03	*	3.05				1.00	.01	*	.85	.23						.99		.05	.49	.04		.20	.05	.63				7.64
Somerville	Raritan		.02		.07	.60	.55				.25		.05	.83	.50						.02		.12	.11	.14			.04	1.20				4.50
South Orange	Rahway				*	1.80	2.20				.55			1.80	§									1.19				1.34	.88				§
Verona**	Passaic				.04	2.23	1.81				.28	.01	.44	1.34	.15		.07				.84		.92	.22			T.	.32	.38				9.05
Woodcliff Lake**	Hackensack				.19		2.61				.93		.20	1.36	.32						.82		.61	.10				.56	.69				8.39
New York, N. Y***	Coast				.06	1.33	1.53				.99	.01	.97	.67	.19		T.				.25		.62	.08			.28	.29	.45				7.72
The Southern Interior.																																	
Belleplain	Tuckahoe		T.			.15	.20					1.03		.38	.31						.60	.58	.05										3.30
Bridgeton	Coast																																
Burlington	Delaware		.02			.10	1.31				.75			1.23	.30							.96	T.	.48				.91	.32				6.38
Clayton	Delaware				.29	.04					.15	.11		.42	1.72						.32	.10	.52	.14				T.	1.56				5.37
Hammonton	Mullica																																
Hightstown	Raritan	T.	.39		.68	.07	1.39				.34			2.11	.30							.89	.19	.66					2.44				9.46
Imlaystown	Delaware																																
Indian Mills	Mullica		.04		.06	.21	.07				.53			.81	1.85						.30	.03	T.	.06				T.	.93				4.89
Lakewood	Metedeconk		.04				2.95				.35	.06		.04	.90						.91	.55	.42	.05				.05	.70				7.02
Moorestown	Delaware				.15	.20	.43				.18	T.		.13	.25						T.	.09		.01				T.	.77				2.21
Moorestown No. 2.	Delaware					.14	.81	T.				.19		.26	.07	.21						.10		.04	.01				.75				2.58
Northfield	Coast	.20					.73				.83	.23		.30	1.01						.21	.17	.16										3.34
Pleasantville ‖‖	Coast		.79				.02	.78				.48		.04	.31	.68					.02	.69		.16	T.								3.97
Runyon	do		1.05		.37	2.20	.80			.03	.27		.10	1.13	.33						.29			.20	.97				1.63				9.37
Trenton***	Delaware	.23	T.		.03	1.49	.10				.12	.01	.40	1.87	.30					T.	.07	T.	.68	.21				1.03	.63				7.17
Tuckerton	Coast	.03			.08	.07	.92				.15	.12		.18	.66	.05					.05		.35	.03					.12				2.81
Vineland	Maurice																																
Phila., Pa***	Delaware				1.02	.78	T.				.08		.01	.37	.29						.31		.04	.01				.61	.08				3.60
The Sea Coast.																																	
Asbury Park	Coast				.14	.14	2.02				.06	.15		.05	.66						.86		.26	.38				T.	.64				5.36
Atlantic City***	do	.35			.03	.02	.41				.35	.01		.42	1.24						.18	.18	.21	T.				T.					3.40
Cape May City	do				.16	T.	.29	T.			2.04	.01		.85	.45	.01					T.	.05	.40	T.				T.	.73	T.			4.99
Long Branch	do		.31		.05	.33	2.00				.35	.26		.60	.76						1.00		.05	.39				.03	.47				6.60
Sandy Hook***	do	T.			.30	1.55	1.71				.80	T.	.65	1.24	.25						.89		.10	.23				.51	.19				8.42

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.97	30.28	31	29.65	6	14.1	36	ne.	6	81	75	84	69
Long Branch	29.98	30.26	31	29.66	6					78	64	71	
Moorestown No. 2										82	63	81	
New York, N. Y	29.96	30.28	31	29.69	6	12.3	50	n.	20	76	59	69	64
Philadelphia, Pa	29.98	30.29	81	29.70	5	7.6	28	nw.	4	77	62	71	73
Ridgefield	29.96	30.29	31	29.69	6								
Sandy Hook	29.96	30.28	31	29.67	6	10.4	41	n.	6	82	66	78	63
Trenton	29.97	30.28	31	29.68	5	7.7	34	w.	4	78	60	74	66
Verona	29.98	30.29	31	29.71	5	5.0	19	w.	4	77	59	79	70

Daily Temperatures for July, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	89	90	91	94	87	81	89	96	96	82	90	91	87	81	80	90	94	93	93	93	79	75	90	90	90	89	89	88	81	82	86	87.9
	Minimum	60	58	60	66	66	64	66	65	67	68	68	64	65	69	58	65	59	61	68	70	61	65	66	60	64	64	65	68	58	50	50	63.2
Charlotteburg	Maximum	82	87	87	90	89	77	88	94	92	80	84	87	85	78	81	86	88	89	89	87	70	70	85	86	85	84	80	84	80	76	78	83.8
	Minimum	66	57	56	65	66	61	52	59	64	65	67	61	65	69	56	57	57	58	66	66	59	62	68	62	62	59	65	65	58	41	42	60.5
Dover	Maximum	85	86	88	90	83	79	85	95	91	79	86	89	79	77	83	87	89	88	89	89	76	72	86	88	88	82	79	84	78	79	86	84.4
	Minimum	60	61	61	68	66	62	55	65	68	68	65	64	66	68	57	62	58	63	68	63	61	64	....	64	62	62	68	67	57	48	48	62.3^{a}
Layton	Maximum	84	88	86	91	85	80	85	94	92	84	83	87	80	79	80	86	88	89	89	90	70	70	84	85	85	85	78	86	77	70	80	83.5
	Minimum	59	57	58	69	67	67	53	61	66	64	67	60	63	69	55	56	57	56	66	67	60	63	65	59	59	59	67	66	54	54	45	60.9
Newton	Maximum	83	87	87	89	86	79	83	91	91	80	85	85	79	77	82	86	87	88	87	88	70	72	85	85	85	85	83	85	78	76	81	83.4
	Minimum	59	60	62	67	65	64	55	65	68	65	65	62	63	68	57	66	59	65	69	60	58	62	65	62	62	62	66	66	57	49	49	62.0
Phillipsburg	Maximum	85	86	90	92	85	81	84	94	93	80	89	88	81	78	82	86	90	91	89	90	72	74	87	88	89	87	82	85	79	79	83	85.1
	Minimum	61	61	61	66	66	65	57	64	68	69	70	64	67	67	58	60	60	62	67	68	63	65	68	64	65	63	70	69	59	51	51	63.5
Sussex	Maximum	86	89	88	91	84	80	85	93	92	79	86	87	80	79	81	87	89	88	88	89	72	71	86	86	85	86	....	....	....	....	....	84.9^{e}
	Minimum	58	58	59	66	64	64	54	64	66	65	69	62	64	69	55	60	56	58	62	63	60	63	64	60	58	57	....	....	....	....	....	61.5^{e}
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	85	86	86	90	88	80	87	93	91	84	84	88	81	78	81	87	88	88	88	88	72	73	87	87	86	84	83	85	85	78	80	84.5
	Minimum	61	62	59	64	67	64	66	62	67	65	68	65	66	66	58	59	61	64	67	69	60	62	64	61	61	60	65	67	62	48	47	62.5
Elizabeth	Maximum	86	84	92	93	87	78	85	94	94	86	85	90	81	78	85	88	91	91	91	93	77	75	89	89	90	93	85	88	82	80	83	86.5
	Minimum	64	63	63	71	67	65	58	62	72	68	70	67	67	71	61	62	61	64	70	71	63	65	71	61	66	65	69	69	61	52	53	64.9
Flemington	Maximum	84	87	89	90	87	80	86	93	92	84	86	90	78	79	83	87	92	92	92	93	85	75	88	89	87	87	82	87	82	79	83	86.1
	Minimum	62	64	61	67	67	65	57	63	69	68	70	65	66	68	59	61	62	63	70	72	62	66	70	65	65	64	70	69	59	52	51	64.3
Highwood	Maximum	79	81	88	90	83	75	84	90	90	86	83	83	75	75	81	85	85	88	87	84	70	72	83	85	84	80	77	83	78	76	79	81.9
	Minimum	61	61	63	68	68	63	57	63	68	68	69	68	67	71	60	65	61	61	69	66	61	61	61	62	62	61	68	67	60	50	50	63.2
Jersey City	Maximum	85	86	92	93	89	80	85	94	96	87	85	89	82	79	86	89	91	92	92	93	75	77	85	91	90	86	85	91	79	80	85	86.7
	Minimum	64	67	67	70	68	63	61	64	74	68	70	68	67	69	65	67	69	70	73	64	63	65	68	68	70	68	68	69	63	62	62	66.9
Lambertville	Maximum	83	87	89	91	92	78	86	92	92	82	86	89	79	78	83	87	89	91	90	89	70	74	85	85	85	86	85	85	79	77	82	84.7
	Minimum	62	63	64	66	66	65	64	63	71	69	61	66	66	70	59	66	60	64	66	66	64	....	....	....	....	64	69	69	59	54	54	64.1^{d}
Little Falls§§	Maximum	85	87	90	92	89	80	88	95	94	85	86	90	81	79	84	88	90	90	90	90	72	76	89	89	88	85	84	87	79	79	83	85.9
	Minimum	60	61	61	68	67	64	56	65	69	67	70	66	66	69	59	62	60	62	69	70	61	64	69	64	63	66	66	67	61	60	50	63.9
New Brunswick	Maximum	83	87	88	93	87	80	85	91	93	90	85	90	85	78	84	88	91	90	90	90	75	77	87	88	87	87	86	86	86	78	82	86.0
	Minimum	63	64	63	68	70	68	62	62	72	68	70	70	66	71	60	64	61	65	70	72	62	65	72	64	67	64	69	68	61	53	53	65.4
Paterson	Maximum	83	84	90	92	85	78	83	94	94	87	82	87	84	75	84	87	89	90	88	89	72	71	85	87	87	84	80	85	82	80	83	84.5
	Minimum	61	65	65	70	70	64	59	66	73	69	71	69	66	71	61	64	64	67	73	72	62	65	70	66	65	66	68	68	62	55	56	65.9
Plainfield	Maximum	84	86	91	92	89	79	84	94	96	87	86	89	81	78	86	89	92	92	92	94	75	77	82	92	91	86	87	91	79	81	85	86.7
	Minimum	62	62	61	65	63	62	57	62	70	67	68	68	67	66	63	61	60	65	66	70	61	65	67	64	64	61	64	65	60	50	50	63.1
Ridgefield	Maximum	83	84	90	92	85	78	86	95	93	85	86	88	79	77	85	87	90	90	88	89	73	73	87	87	86	80	80	86	78	79	81	84.5
	Minimum	61	62	64	67	68	64	58	63	72	69	68	68	67	71	61	65	63	66	72	62	61	64	68	64	65	64	68	68	59	53	51	64.4
Somerville	Maximum	84	86	90	90	86	78	85	93	94	85	85	88	80	77	84	88	90	91	90	87	74	75	86	86	87	84	84	86	77	79	82	84.9
	Minimum	65	63	70	68	67	61	55	61	69	68	71	65	68	71	58	60	59	62	76	74	62	65	65	61	64	63	70	65	59	50	50	64.0
South Orange	Maximum	87	87	90	90	92	81	85	95	96	90	87	....	....	....	85	87	89	91	92	92	75	73	88	....	90	89	89	85	87	80	84	87.3^{d}
	Minimum	62	62	61	....	65	64	57	62	69	65	69	....	66	70	58	60	60	64	69	70	62	64	71	....	64	65	61	66	57	49	50	62.9^{c}
Verona	Maximum	81	81	85	87	83	76	80	89	89	82	82	84	77	74	79	82	84	86	85	86	69	72	83	83	83	78	80	82	75	75	78	81.0
	Minimum	62	62	65	68	65	63	58	65	73	68	69	67	66	69	60	64	62	67	71	62	60	64	68	65	66	64	67	68	55	52	52	64.1
New York, N. Y.	Maximum	82	84	88	89	85	76	82	91	92	83	82	87	78	76	81	85	87	87	88	88	75	74	85	85	84	80	80	84	76	76	79	82.9
	Minimum	64	68	68	70	68	63	61	64	74	68	70	68	68	70	65	67	70	70	73	64	63	65	69	68	71	68	68	69	63	62	63	67.2
The Southern Interior.																																	
Belleplain	Maximum	86	88	89	93	88	81	87	91	92	88	82	85	80	81	84	89	92	90	93	95	82	79	85	92	90	84	85	90	84	85	83	86.9
	Minimum	60	56	54	65	65	64	53	58	68	65	67	68	68	67	58	61	58	58	58	69	62	62	71	....	59	60	63	66	55	45	42	60.8^{a}
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	84	89	91	94	88	78	82	92	94	86	85	88	86	80	84	88	90	91	91	93	72	77	87	88	89	91	86	88	77	80	83	86.2
	Minimum	63	67	63	67	68	67	61	61	73	67	70	68	67	70	60	67	68	69	70	74	63	66	68	65	67	65	68	70	62	53	52	65.8
Clayton	Maximum	84	86	89	92	88	81	85	92	92	86	84	85	87	77	82	86	89	90	91	91	82	83	85	87	89	88	89	87	77	80	83	86.0
	Minimum	62	63	62	64	69	67	61	59	67	70	68	66	67	64	60	65	67	65	69	64	63	63	65	69	72	71	69	70	61	54	52	64.8
Hightstown	Maximum	84	87	90	92	89	78	87	93	94	88	86	88	82	80	85	89	90	92	92	92	71	77	88	87	86	85	88	88	77	80	84	86.1
	Minimum	62	61	62	62	64	65	56	61	71	62	69	69	63	69	59	64	62	65	69	71	62	66	70	67	63	62	66	69	60	51	52	63.7
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	83	87	91	95	89	75	86	93	94	89	83	90	81	76	84	90	90	93	92	92	81	78	83	86	86	88	87	88	77	80	85	86.2
	Minimum	61	62	60	65	67	66	68	69	68	66	70	70	67	69	58	63	62	61	69	72	62	65	73	63	64	63	69	68	61	50	48	64.5
Lakewood	Maximum	81	83	90	92	87	81	81	92	91	86	84	87	82	78	84	87	89	90	90	89	71	77	85	87	87	85	85	87	85	80	80	84.9
	Minimum	61	60	57	65	66	63	55	60	70	63	68	68	62	68	59	62	62	66	69	71	61	63	71	64	64	61	67	68	60	50	49	63.0
Moorestown	Maximum	81	87	83	92	87	78	85	92	93	83	81	87	84	79	85	87	90	91	92	93	72	75	85	83	88	90	82	87	80	82	85	85.2
	Minimum	62	62	61	63	66	64	59	62	70	67	68	66	66	68	60	66	64	65	69	72	62	64	70	63	65	65	67	67	60	54	52	64.2
Moorestown No. 2	Maximum	84	88	88	91	87	78	84	91	92	85	84	87	82	77	83	87	90	90	90	91	72	78	86	87	87	88	86	88	78	80	83	85.2
	Minimum	62	63	63	67	67	63	59	63	71	68	70	68	68	69	60	66	64	67	70	66	63	66	69	65	66	65	69	70	59	54	53	64.9
Pleasantville§§	Maximum	79	81	83	85	82	71	77	88	86	80	80	85	85	77	80	84	87	87	87	92	72	78	84	87	86	83	83	89	78	82	81	82.5
	Minimum	60	60	61	66	66	65	55	....	65	65	65	64	66	66	62	62	63	64	64	71	63	65	63	61	64	64	69	71	58	50	46	62.8^{a}
Runyon	Maximum	84	88	90	93	87	80	83	93	94	89	89	89	89	80	84	89	90	92	91	92	80	78	89	89	90	86	86	86	80	80	83	86.9
	Minimum	60	62	60	56	56	62	53	58	58	66	58	64	67	70	56	56	56	68	67	70	64	70	70	62	60	57	66	62	58	45	46	60.7
Trenton	Maximum	83	87	89	91	88	78	85	91	93	84	84	88	79	77	83	87	90	91	90	91	71	75	86	87	85	86	85	86	77	79	83	84.8
	Minimum	63	63	66	68	65	65	62	63	71	69	71	66	66	69	63	66	67	69	71	65	62	66	69	66	69	69	70	68	62	59	59	66.0
Tuckerton	Maximum	81	82	86	87	84	76	78	88	89	83	78	87	78	76	80	87	87	88	90	95	72	78	84	88	87	82	85	91	80	86	84	83.8
	Minimum	59	61	63	70	66	66	55	61	68	67	64	66	63	64	62	65	63	63	64	66	62	64	73	60	65	64	65	70	57	52	50	63.2
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	85	88	89	91	87	81	85	91	92	83	84	87	79	77	82	88	90	90	91	93	72	77	86	87	87	89	85	88	78	80	82	85.3
	Minimum	65	69	69	70	67	67	67	68	73	70	72	70	70	71	67	70	72	73	73	70	65	68	72	69	73	73	72	71	64	65	65	69.4
The Sea Coast.																																	
Asbury Park	Maximum	78	81	88	90	80	70	78	89	87	78	80	85	78	73	82	85	86	89	85	84	72	73	83	85	88	81	80	88	79	81	79	81.8
	Minimum	64	67	65	69	69	65	61	63	73	67	66	67	66	62	65	65	68	70	71	68	64	67	71	66	70	69	72	70	63	57	59	66.4
Atlantic City	Maximum	74	78	76	78	76	71	73	76	77	74	78	76	72	72	78	79	82	78	79	87	70	76	84	85	82	79	81	88	80	83	79	77.9
	Minimum	64	65	66	67	68	64	61	64	66	66	66	65	66	66	65	66	68	69	69	65	64	67	70	67	70	71	72	71	64	62	62	66.3
Cape May City	Maximum	82	82	78	78	77	79	76	82	77	78	78	82	75	74	80	82	80	78	82	92	78	73	86	85	85	84	84	87	76	80	80	80.3
	Minimum	66	64	65	66	68	63	60	62	66	67	66	68	66	66	66	66	67	67	69	68	66	68	72	67	69	69	71	71	59	58	58	65.9
Long Branch	Maximum	70	82	88	91	72	71	76	92	91	86	82	79	77	74	80	84	86	91	88	89	70	75	80	80	87	72	76	87	72	78	71	80.5
	Minimum	64	63	61	67	66	64	60	60	72	67	69	69	69	68	62	64	63	67	71	65	62	65	73	65	67	66	71	69	62	54	53	65.1
Sandy Hook	Maximum	82	80	88	88	84	71	79	90	89	82	80	86	75	75	82	87	85	88	88	88	71	73	84	85	84	77	79	84	76	78	80	81.9
	Minimum	66	67	67	69	68	66	63	65	73	68	71	70	68	70	66	69	69	70	72	64	63	66	70	69	71	71	71	71	65	63	64	67.9

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.214	.160	.224	.240	.244	.076	.256	.224	.224	.176	.144	.200	.134	.168	.224	.240	.224	.272	.212	.306	*	.128	.144	.224	.224	.224	.224	.320	.256	.304	.256	6.466
	Wind movement	48	25	52	39	63	82	53	34	60	55	38	50	89	42	47	25	27	88	37	*	101	*	66	39	17	69	49	53	*	73	45	1,416
Runyon	Evaporation	.200	.150	.160	.070	.000	.080	.210	.240	.240	.150	.150	*	.210	.010	.200	.210	.260	.270	.180	.080	.180	.080	.080	.220	.270	.240	.210	.030	.200	.220	.220	5.020
	Wind movement	28	32	33	32	35	33	43	20	28	30	40	30	20	70	30	40	10	10	10	11	33	15	17	13	14	20	24	30	36	24	17	880

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

1.05
NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

Vol. XXXIII. August, 1928. No. 8

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Without reaching a 100° maximum at any reporting point, August developed a mean temperature 0.3° higher than July, 1928, and 7.4° higher than August, 1927. Warmer Augusts have been recorded in the years 1898, 1900, and 1906 only. This was, accordingly, the warmest month of the name in over 20 years. Every station in the State registered a mean temperature above normal. The difference between the warmest station, Burlington, and the coolest station, Layton, was but 5.2°. The greatest departures from normal were 3.9° at South Orange, and 3.8° at Belvidere. The least departure from the normal was 0.8° at Little Falls. The warmest period centered on the 4th, a few stations reporting the 3d or 5th warmer, while in some localities on the shore the 30th was the warmest day. The lowest temperatures were recorded from the 12th to 14th and on the 20th.

Precipitation was frequent and widely distributed over the State. Only a few stations reported amounts for the month less than normal. These were in the northern half of the State. High winds on the 12th caused the sinking of a small yacht in Barnegat Bay, but it was subsequently raised.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 74.5°, which was 2.3° above normal. The highest temperature was 99° at Tuckerton on the 3d and Belleplain on the 4th, and the lowest, 45°, at Layton on the 13th. The greatest daily range of temperature was 40° at Belleplain on the 14th. The highest monthly mean temperature was 77.0° at Burlington, and the lowest, 71.8° at Layton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +0.7°; Red Sandstone Plain, +0.1°; Southern Interior, +0.2°; Sea Coast, +0.4°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 41 stations, was 6.72 inches, which was 1.99 inches above normal.

The greatest monthly precipitation was 14.26 inches, at Belvidere, and the least, 3.33 inches at Asbury Park. The greatest amount of precipitation in any 24 consecutive hours was 4.08 inches at Belvidere on the 17th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 3 more than normal.

The precipitation accumulated departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +9.52 inches; Red Sandstone Plain, +6.15 inches; Southern Interior, +2.09 inches; Sea Coast, +0.72 inch.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 8 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 62 miles per hour from the northeast at Atlantic City on the 12th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was which was 1 less than normal; partly cloudy, 8, or 3 less n normal; cloudy, 11, or 4 more than normal. The per cent ossible sunshine was 52, which was 14 per cent below normal.

MISCELLANEOUS.

'he mean atmospheric pressure, reduced to sea level, was 03 inches, which was 0.03 inch above normal. The highest ling was 30.34 inches on the 27th at Verona, and the low- 29.63 inches on the 18th at Ridgefield.

'he mean stage of the Delaware River at Phillipsburg was 4.2 . The highest stage was 9.0 feet on the 27th. At Trenton mean stage was 2.5 feet, which was 1.4 feet above normal. highest stage was 5.1 feet on the 28th.

ight hail was noted (at New Brunswick) on the 10th, no lage was reported. Thunderstorms occurred on the follow- dates: 3, 4, 5, 6, 9, 10, 11, 12, 16, 17, 18, 25, 26, 28, 29, 31. Dense fog was noted by various observers on the follow- dates: 9, 10, 18. Gales were recorded on the 12th and the ht of the 11th, with considerable damage to trees and fruit.

ERRATA.

rch 1927. Pleasantville, amount of precipitation on the 8th, .01 inch should be .10 Total monthly precipitation, 1.15 inches should be 1.24 inches. Departure, −2.32 s should be −2.23 inches. Number of days with .01 inch or more, 10 should be 8. n Point, mean minimum temperature, 34.4° should be 34.7°.

y 1927. Cape May City, minimum temperature on the 27th, 56° should be 52°. Mean num temperature, 52.3° should be 52.1°.

y 1927. Cape May City, mean minimum temperature, 72.9°, should be 72.8°. De- re, −0.5° should be −0.6°. Minimum temperature on the 4th, 67° should be 57°. minimum temperature, 65.3° should be 65.0°.

COMPARATIVE DATA FOR AUGUST

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
....	71.7	95	40	6.11	10.09	3.47	......	......	......	......
....	69.5	96	42	2.81	5.36	1.10	......	......	......	......
....	70.4	94	42	3.76	7.34	2.09	......	......	......	8
....	72.5	98	41	6.13	10.53	2.55	......	......	8	9
....	69.6	91	45	5.13	9.06	1.93	......	......	8	10
....	71.5	99	40	4.90	7.51	2.89	8	15	8	11
....	72.8	100	**46**	5.32	8.89	2.58	8	11	12	13
....	73.4	99	**46**	3.63	5.65	0.72	12	13	6	9
....	72.8	98	38	6.52	11.94	3.55	14	11	6	8
....	70.9	97	44	2.58	9.28	0.15	13	12	6	7
....	74.2	102	*34*	2.53	5.06	*0.02*	16	12	3	7
....	73.6	105	39	1.83	*3.27*	0.50	17	10	4	7
....	71.0	91	41	4.39	8.69	2.07	14	12	5	9
....	74.8	98	42	5.36	9.28	2.70	12	12	7	10
....	72.3	99	39	4.36	9.70	2.16	10	12	9	9
....	**76.3**	104	41	2.68	4.56	0.70	15	11	5	10
....	73.8	98	44	**9.43**	15.80	4.88	12	10	9	11
....	70.1	93	40	3.91	10.67	1.31	15	13	3	9
....	68.4	98	39	6.95	14.54	4.30	10	10	11	13
....	70.8	92	37	6.62	13.01	2.65	15	10	6	9
....	71.1	95	38	5.72	9.88	3.51	13	10	8	12
....	74.6	97	42	5.95	**17.91**	2.21	10	11	10	13
....	70.5	96	39	3.45	7.61	1.79	14	12	5	10
....	70.6	103	36	5.05	9.23	2.43	11	10	10	10
....	70.2	100	*34*	4.59	12.94	1.41	14	9	8	6
....	70.4	92	36	3.78	8.46	1.76	9	10	12	10
....	72.1	101	39	8.91	14.74	**5.31**	10	11	10	11
....	70.0	95	35	3.42	7.62	1.19	12	13	6	10
....	71.7	100	38	4.06	10.21	1.93	18	9	4	10
....	73.3	98	**46**	3.15	6.53	1.04	13	12	6	9
....	70.9	98	41	7.73	10.92	4.02	11	11	9	13
....	73.2	100	40	*1.34*	4.15	0.27	20	7	4	6
....	74.0	103	42	2.21	5.68	0.86	18	9	4	8
....	74.4	**108**	40	1.85	4.25	0.34	18	7	6	7
....	69.9	98	38	6.89	12.88	3.09	13	10	8	13
....	72.3	94	42	6.10	10.60	2.94	8	11	12	17
....	69.8	97	38	4.32	8.01	2.05	18	7	6	9
....	71.2	96	39	4.03	6.78	2.18	13	9	9	12
....	70.8	98	35	2.44	4.81	1.23	17	8	6	8
....	71.9	102	38	4.40	9.48	1.82	18	8	5	8
....	71.0	93	35	2.10	4.12	0.94	20	6	5	7
....	72.8	101	38	6.58	8.84	3.74	11	9	11	14
....	*67.1*	*89*	37	8.55	12.87	2.88	11	9	11	12
....	74.5	99	45	6.72	14.26	3.33	12	8	11	13

W. B. O. Philadel0-5-28-810.

Climatological for August, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees F						Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																			
Belvidere	Warren	289	37	74.8	+3.8	97	4	49	37	14.26	+9.65	4.08	0	13	16	4	11	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	72.2	+4.3	94	10	50	39	9.63	+5.01	2.35	0	17	3	6	22	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	50	....	10.31	+5.89	2.94	0	16	18	4	9	e.	Brice E. Riker.
Dover	Morris	600	44	72.2^{a}	+3.1	94	4	54^{a}	33^{a}	8.57	+3.81	1.59	0	18	1	19	11	......	William C. Harris.
Layton	Sussex	480	27	71.8	+3.4	94	4	45	38	6.95	+3.05	2.06	0	10	12	7	12	sw.	A. M. Depue.
Newton	Sussex	769	44	73.3	+2.9	92	4	54	31	8.11	+3.69	2.38	0	15	12	5	14	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	73.9	+2.1	94	4†	56	33	10.59	+5.97	2.84	0	15	16	9	6	......	Town Engineer.
Sussex	Sussex	442	33	72.6^{c}	+3.1	94^{b}	4	46^{c}	39^{c}	7.29	+3.03	2.05	0	14	10	6	15	sw.	A. J. W. Mowatt
Means and extremes	......	......	....	73.0	+3.2	97	4	45	39	9.46	+5.01	4.08	0	15	11	8	12	sw.	
The Red Sandstone Plain.																			
Bayonne*	Hudson	37	31	......	......	......	......	......	....	5.34	+0.28	1.35	0	10	19	9	3	......	William Mann.
Boonton	Morris	400	§38	72.5	+1.2	94	5	53	34	10.08	+5.00	3.93	0	17	10	0	21	sw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	....	8.47	+4.06	3.25	0	14	14	6	11	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	76.1	+2.7	96	4	58†	31	6.32	+2.03	1.32	0	15	18	7	6	ne.	Union County Park Com
Flemington	Hunterdon	140	§42	75.1	+2.6	95	5	56	34	5.80	+1.09	1.66	0	12	15	6	10	sw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	72.6	+1.8	92	4	55	29	5.95	+1.20	1.89	0	14	8	9	14	sw.	Charles J. Bates.
Jersey City	Hudson	10	30	76.0	+1.9	97	5	61†	24	4.26	−0.27	0.86	0	14	10	13	8	sw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	74.6	+2.2	93	4†	56	27	5.52	+0.86	1.53	0	15	16	3	12	s.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	74.0	+0.8	95	4†	55†	30	7.10	+2.70	1.16	0	17	10	7	14	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	75.3	+3.2	94	4	58†	29	5.87	+0.72	1.31	0	14	14	9	8	sw.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	74.6	+2.4	96	4	56	25	8.04	+3.31	1.75	0	16	12	6	13	sw.	Marion T. Probert.
Plainfield	Union	120	40	74.6	+2.8	97	4†	55	33	5.58	+0.37	1.38	0	15	8	11	12	sw.	E. D. Pearson.
Ridgefield	Bergen	80	11	74.6	......	95	4	55	28	5.11	......	1.20	0	14	9	8	14	s.	George P. Kirsten.
Somerville	Somerset	70	45	74.3^{i}	+1.9	96^{i}	4	54^{i}	32^{i}	4.53	−0.31	1.41	0	9	14	8	9	......	Arthur Gerlich.
South Orange	Essex	200	58	74.8	+3.9	95	4†	56†	32	7.94	+2.86	1.95	0	16	9	10	12	e.	Everett W. Bird.
Verona	Essex	490	2	72.3	......	90	4†	57†	24	7.64	......	3.03	0	14	7	8	16	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	74.4	+1.3	90	4	61	19	4.26	−0.07	1.14	0	15	5	12	14	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.4	+2.3	97	4†	53	34	6.47	+1.71	3.93	0	14	12	8	11	sw.	
The Southern Interior.																			
Belleplain	Cape May	30	34	75.2^{a}	+2.6	99^{a}	4	50^{a}	40^{a}	6.89	+2.59	......	0	9	19	6	6	s.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§42	77.0	+2.8	96	5	58	25	5.03	−0.42	1.14	0	10	11	11	9	sw.	Public Service Power Co.
Clayton††	Gloucester	130	30	76.4^{d}	+3.3	95^{d}	4	57^{d}	30^{d}	6.91	+1.99	2.15	0	11	5^{b}	17^{b}	7^{b}	sw.	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Hightstown	Mercer	120	34	75.8	+3.5	95	4†	53	35	4.67	+0.09	1.05	0	12	16	7	8	sw.	Charles Welsh.
Imlaystown	Monmouth	115	37	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	76.2	+3.6	98	4	55	35	7.80	+1.87	1.69	0	9	8	15	8	sw.	James M. Armstrong.
Lakewood	Ocean	54	24	74.4	+3.3	94	4	55†	30	7.09	+1.04	1.30	0	15	14	4	13	sw.	R. W. Holman.
Moorestown	Burlington	75	65	75.6	+3.0	98	4	57†	31	5.19	+0.30	1.40	0	9	17	6	8	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	75.6	......	96	4	58†	29	4.94	......	1.12	0	10	8	8	15	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	....	7.26	+2.91	3.27	0	8	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	75.4^{b}	......	95^{b}	3	53^{b}	32^{b}	6.18	+1.25	3.69	0	9^{b}	19^{b}	5^{b}	5^{b}	s.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	74.0	......	96	4	50	39	6.17	......	2.52	0	12	11	15	5	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	75.5	+2.5	96	4	57	26	3.40	−1.97	1.94	0	12	7	9	15	sw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	75.6	+2.9	99	3	54†	32	5.77	+0.23	3.29	0	7	14	3	14	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	H. C. Himes
Philadelphia, Pa	......	117	57	77.2	+2.4	95	4	59	20	5.47	+0.85	2.76	0	12	4	13	14	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	75.5	+3.0	99	3†	50	40	5.87	+0.79	3.69	0	10	13	8	10	sw.	
The Sea Coast.																			
Asbury Park	Monmouth	22	39	75.4	+3.6	95	3	62	22	3.33	−1.73	0.76	0	9	12	18	1	sw.	Information Bureau.
Atlantic City	Atlantic	16	55	74.7	+2.2	87	18	59	23	6.20	+1.71	3.53	0	7	13	11	7	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	74.8	+1.4	90	30	60	23	5.46	+1.20	3.47	0	6	12	10	9	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	72.8	+1.8	95	30	57†	25	4.68	−1.45	1.04	0	15	12	12	7	s.	William D. Martin.
Sandy Hook	Monmouth	22	30	74.6	+1.8	93	4	61	20	6.31	+1.77	3.34	0	17	9	9	13	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.5	+2.2	95	3†	57†	25	5.20	+0.30	3.53	0	11	12	12	7	s.	
For the State	......	......	....	74.5	+2.7	99	3†	45	40	6.72	+1.98	4.08	0	13	12	8	11	sw.	

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† On other dates also. § Length of precipitation record; tem re record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only h stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in ans.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days mi for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly c Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyo Trenton: Charlotteburg is Newfoundland.

Daily Precipitation August, 1928

Stations	Drainage Basin	Day of month																													Total
		1	2	3	4	5	6	7	8	9	10	11	12 14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																															
Belvidere	Delaware	.16			.14	.53	2.51	.15			.08	T.				4.08					2.72			.65	1.42	1.63	.08		.11		14.26
Charlotteburg	Passaic	.21			.05	*	.31	.07				.44	1.4			2.35	.55				1.50	.10	.01	.88	.26	1.32	.04		.11		9.63
Culvers Lake	Delaware	.25		T.		.48	.78	.05	.02		.05	1.93				2.94	.30				1.00	T.		.39	1.73	.22	.02	.13	.02		10.31
Dover	Passaic	.32		.02	.80	*	*	1.23			.31	.29				1.59					1.28	.06	*	1.17	*	1.30	*	.16	.04		8.57
Layton	Delaware	.36					.63				.12	.65				2.06	.06				.91			.28	1.64	.24					6.95
Newton	Delaware	.23			.19	.24	.88	.02								2.38	.08				1.50			.35	1.10	.11	.10	.36	.53	.04	8.11
Phillipsburg	...do	.13			.28	.21	1.55	.08		.09	T.	.08				2.84	.09				1.47			1.16	1.99	.13	.03		.46		10.59
Sussex	Hudson					.15	.54	.18	.02			1.28				2.05	.14				1.09	.05		.48	.99	.23	.01			.08	7.29
The Red Sandstone Plain.																															
Bayonne	Coast				T.						.75	.50				.58					1.35	.20		*	1.30	.50		T.	.15	.01	5.34
Boonton‖	Passaic		.24		T.	.25	.74	.30	.01			.33	.05			.02	2.01	.01			.44	.65	.03	.71	.35	3.93	.01				10.08
Chatham‖	...do		.21				.97	.05				.05	.43				1.32					1.20	.08	.18	.21	3.25	.27	.06		.19	8.47
Elizabeth	Coast	.08		.03		.03	.87	.04			1.20	1.03	T.			.66	.09				1.32	.02		.19	.67	.22				.37	6.32
Flemington	Raritan	.08					.73	.02				.01	.05			1.66	.15				1.49	T.		.98	.28	.14			.21		5.80
Highwood	Hackensack	.15				.05	.31	.06			.76	.29				1.85	.04				.72	.30		.28	.68	.24		T.	.22	T.	5.95
Jersey City	Coast	.12				T.	.13	.01			.86	.30				.55	.12				.70	.15		.15	.70	.39	T.	.01	.07	T.	4.26
Lambertville	Delaware	.14		T.		.18	.57	.11	.06		T.	.16	.21			1.42	.19				1.53			.41	.29	.05			.14	.06	5.52
Little Falls‖	Passaic		.15			.10	.81	.07	.01			.44	.05			.06	1.16				.20	1.14	.01	.38	.51	1.95	.01			.05	7.10
New Brunswick	Raritan	.08				.09	.53	.02	T.		1.16	1.31	.21			.66	.20				1.04	T.	T.	.11	.10	.11				.25	5.87
New Milford.**	Hackensack																														
Paterson	Passaic	.16				.38	.34	.13	.02		.02	1.28				1.17	.05				.88	.30	.02	1.75	1.33	.15	T.		T.	.06	8.04
Plainfield	Raritan	.20		.31	T.		.50	.01		.04	.52	.02	.05			.75					1.38	.04	*	.88	.77	T.	T.		.09	.02	5.58
Ridgefield	Hackensack	.19				T.	.45	.05			T.	1.20				.72	.04				*	1.02	.02	*	.71	.33	T.		.38		5.11
Somerville	Raritan	.16					1.32			T.		.10	.01			*	.97				1.41				.48				.05	.03	4.53
South Orange	Rahway	.25					.38	.05	.02		.11	.40	.01			.95	.06				1.52	.15		.58	1.39	1.95		.05		.07	7.94
Verona**	Passaic	.12			T.		.50	.03			.20	.15				1.25	.01				1.26	.08		.54	3.03	.06		.18	.23		7.64
Woodcliff Lake**	Hackensack																														
New York, N. Y***	Coast	.11				T.	.14	.01			1.10	.04				.54	.11				.78	.13	.03	.12	.71	.34	T.	.01	.09	T.	4.26
The Southern Interior.																															
Belleplain	Tuckahoe						.11		.80		*	*	4.23			1.48	.03									.18				.06	6.89
Bridgeton	Coast																														
Burlington	Delaware	.02			T.	T.	.70	T.	T.			.16	.75			1.14	.83				.18			.03	T.	.20				1.02	5.03
Clayton	Delaware						T.		.02			.41	2.15		2.05	.01				.21			.10	1.26	.08				.57		6.91
Hammonton	Mullica																														
Hightstown	Raritan					.29	.27	T.			1.05	.04	.32			.81	.66				.37			.17	.09	.08				.52	4.67
Imlaystown	Delaware																														
Indian Mills	Mullica								T.	.09		.93	1.69			1.60					.04			1.05	1.30	.04				1.06	7.80
Lakewood	Metedeconk	T.			.30		.03	.05	.04		.03	1.10	1.30			.45	.08				.15	1.30	T.	.06	.10	.64				.76	7.09
Moorestown	Delaware	.02										.11	1.13			1.40	.50				.15			.70		.33				.85	5.19
Moorestown No. 2	Delaware		.03					T.				.07	1.12			.97	.91	T.		T.	.13				.44		.43			.75	4.94
Northfield	Coast							.69	.11			1.06	3.27			1.22					.10									.56	7.26
Pleasantville‖	Coast							.14	.10		.05	.08	3.69			.56	.68				.05									.83	6.18
Runyon	...do	.03				.57	.32	.05				2.06	.46			.43	.47				1.00			.24	.32					.22	6.17
Trenton***	Delaware	.03			.01	T.	.46	T.			.02	.24	.28			1.94	T.				.08	T.	T.	.05	.01	T.			.23	.05	3.40
Tuckerton	Coast				T.	T.		.13		T.	T.	.53	3.29			.94					.07									.60	5.77
Vineland	Maurice																														
Phila., Pa***	Delaware	.04				T.	.01	T.			.10	.07	1.37			2.76					.14			.05	.35	.11		T.	.46	.01	5.47
The Sea Coast.																															
Asbury Park	Coast	T.						.02	.35			.76	.60			.32					.20	.05				.51				.52	3.33
Atlantic City***	...do							.08	.08		.09	1.79	2.72			.94					T.								.50	T	6.20
Cape May City	...do			.01					.19	T.		1.20	3.47			.56	T.				T.									T.	5.46
Long Branch	...do	T.			.01		.09	.39	.45		.56	.37	.46			.37	T.				.80	.07		T.	.01	.03		.03	.69	.35	4.68
Sandy Hook***	...do	.03		.09	T.	T.	.47	.01		.03	3.28	.11	.02			.48	.01				.97	.15		.07	.03	.07			.48	.01	6.31

Except as otherwise indicated, observations are generally made late in the aftern near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour perimidnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.02	30.30	27	29.68	18	14.1	62	ne.	12	84	76	86	63
Long Branch	30.03	30.30	27	29.67	18					83	69	79	
Moorestown No. 2										90	70	88	
New York, N. Y	30.03	30.30	27	29.64	18	10.9	45	s.	10	82	67	77	58
Philadelphia, Pa	30.04	30.32	27	29.70	18	8.0	44	ne.	12	82	64	72	50
Ridgefield	30.03	30.30	27	29.63	18								
Sandy Hook	30.02	30.30	27	29.64	18	10.6	43	ne.	12	85	73	84	51
Trenton	30.02	30.32	27	29.67	18	7.7	35	ne.	12	85	67	78	49
Verona	30.04	30.34	27	29.64	18	4.6	30	w.	30	84	66	86	45

Daily Temperatur August, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	1	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																
Belvidere	Maximum	82	93	95	97	95	81	79	91	91	92	81		92	93	94	82	89	85	85	83	74	70	85	77	77	77	86	94	93	81	85.7
	Minimum	61	66	68	71	70	65	64	68	67	67	67		56	58	63	62	67	65	52	57	62	57	65	67	69	68	70	68	68	65	63.9
Charlotteburg	Maximum	78	78	90	93	93	91	70	85	88	94	88		89	90	90	89	84	82	82	80	79	65	77	73	73	72	81	92	90	86	83.2
	Minimum	59	64	62	68	69	66	60	64	63	65	62		50	51	54	58	64	66	52	51	59	57	62	64	68	67	68	62	65	66	61.2
Dover	Maximum	77	89	91	94	92	78	71	85	88	85	75		88	90	90	73	85	83	80	79	70	64	74	72	75	74	83	88	89	79	81.2
	Minimum	64	65	67	....	70	63	61	66	66	66	67		56	57	59	61	69	64	54	56	59	59	63	68	66	67	70	71	68	56	63.1^a
Layton	Maximum	79	89	93	94	91	88	78	85	88	88	83		88	88	88	76	85	80	81	78	73	65	80	73	76	76	76	91	90	78	82.4
	Minimum	60	68	66	68	62	60	62	60	67	67	67		53	58	58	56	66	65	49	52	61	55	62	68	66	60	68	67	67	63	61.3
Newton	Maximum	79	88	91	92	91	81	76	88	91	81	85		82	89	89	81	86	78	82	80	79	67	79	79	82	81	84	90	89	85	83.5
	Minimum	62	65	69	70	69	63	60	65	65	66	56		64	58	68	60	66	64	54	55	58	57	62	67	66	66	69	70	68	55	63.1
Phillipsburg	Maximum	80	91	93	84	84	79	75	87	89	91	77	3	89	90	90	72	84	83	80	81	69	70	84	76	76	78	85	91	92	78	83.1
	Minimum	60	65	68	70	71	65	65	68	67	68	70		56	58	62	64	69	62	56	59	59	58	66	69	70	71	71	67	68	65	64.7
Sussex	Maximum	....	92	92	94	91	82	72	87	89	90	83	3	90	90	89	81	87	81	....	82	78	65	80	73	75	73	85	90	90	81	83.4^b
	Minimum	....	59	....	69	69	64	60	67	65	54	61	6	51	55	57	58	67	67	....	50	61	58	62	68	67	67	69	71	67	64	61.8^c
The Red Sandstone Plain.																																
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	79	89	90	92	94	75	73	84	90	88	78	1	87	89	87	72	87	81	84	80	66	67	79	80	78	78	83	91	89	79	82.1
	Minimum	55	65	66	68	69	68	60	61	67	65	66	8	55	55	58	59	64	69	53	55	61	59	60	65	68	67	69	69	68	67	62.9
Elizabeth	Maximum	81	92	95	96	95	87	84	85	93	91	82	3	89	92	91	80	89	84	82	80	72	69	78	83	82	81	87	94	94	81	85.7
	Minimum	63	67	70	72	72	67	62	63	70	69	70	0	58	61	62	65	71	71	58	71	61	58	65	70	70	68	71	71	73	68	66.5
Flemington	Maximum	80	92	94	94	95	89	74	88	93	91	81	3	91	90	81	79	87	81	85	83	79	70	82	78	80	83	86	93	92	77	84.8
	Minimum	61	65	70	73	70	66	64	68	69	69	70	7	57	59	61	64	70	70	56	58	61	59	66	70	67	71	71	69	69	68	65.4
Highwood	Maximum	78	87	90	92	90	79	68	79	85	82	76	8	83	87	87	79	84	79	76	76	69	67	73	75	77	76	80	86	89	76	79.9
	Minimum	65	65	70	73	71	65	61	67	69	70	70	5	57	58	60	63	58	68	57	60	61	59	64	69	71	69	71	71	76	67	65.2
Jersey City	Maximum	82	94	94	96	97	79	74	87	91	92	82	2	88	91	92	74	89	83	81	81	70	69	77	82	76	82	85	92	92	80	84.1
	Minimum	67	70	73	75	75	66	63	68	71	70	71	1	66	70	69	64	70	69	64	66	62	61	65	69	69	69	71	71	74	66	68.0
Lambertville	Maximum	78	91	92	93	93	78	74	87	91	90	80	1	88	89	87	73	84	80	79	81	66	72	83	83	80	80	85	91	91	76	83.6
	Minimum	62	67	70	74	70	66	65	67	71	69	69	7	61	63	63	65	69	63	56	58	60	59	65	69	69	71	71	70	73	62	65.5
Little Falls§§	Maximum	80	92	93	95	95	72	73	88	92	87	78	3	91	91	91	74	89	81	85	80	66	69	78	78	79	78	86	92	92	79	83.3
	Minimum	64	65	69	73	77	65	61	62	69	67	68	5	56	59	60	62	65	70	55	59	59	59	61	68	70	68	68	72	69	69	64.7
New Brunswick	Maximum	79	91	92	94	93	91	73	87	92	91	80	1	88	89	87	84	87	83	80	80	74	73	78	81	80	79	85	93	92	87	84.5
	Minimum	64	69	71	74	71	66	63	68	71	69	70	8	61	60	63	60	71	70	58	58	61	60	61	69	70	71	71	70	74	68	66.1
Paterson	Maximum	78	90	92	96	92	84	69	84	88	84	78	2	87	89	90	83	85	82	78	80	71	66	76	75	77	75	84	89	91	85	82.4
	Minimum	65	70	72	76	72	66	62	67	71	70	69	7	63	65	66	65	66	71	56	62	62	60	64	70	72	69	71	72	72	70	66.9
Plainfield	Maximum	83	94	95	97	97	79	74	88	92	92	82	2	88	92	93	74	89	83	81	81	68	69	79	82	75	82	85	92	93	80	84.4
	Minimum	62	67	70	72	71	67	61	67	70	69	67	7	57	59	60	60	64	69	55	59	59	59	60	68	70	68	70	70	71	67	64.7
Ridgefield	Maximum	79	91	93	95	93	74	70	85	90	86	79	3	88	91	90	72	88	84	82	78	77	70	77	78	81	79	84	90	92	78	83.0
	Minimum	64	67	72	75	72	65	62	68	72	70	69	5	60	63	65	65	72	65	58	61	60	59	65	70	69	69	72	71	74	60	66.2
Somerville	Maximum	81	91	94	96	95	83	74	89	92	90	83	2	88	....	....	....	....	83	80	81	72	71	....	....	....	....	....	93	93	78	84.7^i
	Minimum	62	65	69	71	70	66	63	68	69	71	69	8	56	....	....	....	....	57	54	57	61	63	....	....	....	....	....	68	67	60	63.9^i
South Orange	Maximum	81	91	94	95	95	90	73	87	92	89	80	5	89	91	91	88	89	84	85	80	72	67	75	78	79	78	86	93	93	80	84.8
	Minimum	59	65	69	70	70	66	62	67	69	69	69	7	57	60	62	63	68	70	56	56	60	59	63	69	71	68	70	69	71	67	64.9
Verona	Maximum	76	87	88	90	90	74	69	81	86	83	77	8	83	86	86	70	84	79	76	76	66	66	73	77	75	75	82	89	88	75	79.3
	Minimum	64	68	72	74	72	62	60	66	70	68	68	7	59	64	66	64	70	62	57	60	60	60	64	69	68	68	70	71	72	60	65.3
New York, N. Y	Maximum	77	89	90	90	90	75	72	82	87	88	78	79	85	90	86	73	85	81	79	75	69	69	72	78	77	80	83	88	88	77	80.8
	Minimum	68	70	73	76	75	65	63	68	71	70	71	62	67	71	69	64	70	68	65	66	62	61	65	70	69	69	71	72	74	63	68.1
The Southern Interior.																																
Belleplain	Maximum	....	95	98	99	94	97	81	86	92	92	85	85	90	91	85	82	87	87	86	79	79	82	81	87	78	86	89	93	94	83	87.3^a
	Minimum	....	61	61	73	70	68	68	69	63	65	68	57	50	53	68	62	64	64	53	53	56	56	56	67	69	68	62	62	73	68	63.0^a
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	82	92	94	95	96	81	77	89	94	94	89	81	87	89	87	82	87	86	81	83	80	77	85	86	82	83	88	91	93	79	86.1
	Minimum	62	67	72	72	75	70	66	68	71	70	70	63	66	68	70	65	71	70	59	58	65	62	67	70	73	70	70	71	72	71	67.8
Clayton	Maximum	82	91	94	95	93	94	82	90	93	92	77	81	87	....	....	....	84	85	82	77	82	84	83	81	82	85	91	92	86	....	85.9^d
	Minimum	64	70	70	73	72	73	69	73	71	71	70	58	57	....	....	....	69	61	59	59	59	66	65	70	71	69	72	73	67	....	67.0^d
Hightstown	Maximum	83	93	94	95	95	90	76	88	93	94	80	82	89	91	90	86	88	85	82	83	76	77	82	82	83	80	88	94	93	89	86.4
	Minimum	64	63	70	74	71	63	64	67	71	77	68	56	54	57	59	62	70	66	53	57	62	60	65	69	70	70	70	71	74	68	65.2
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	82	94	96	98	96	90	81	90	94	94	81	81	86	91	85	80	86	81	81	83	78	81	85	83	82	85	89	94	94	84	86.4
	Minimum	61	66	69	72	72	70	68	69	70	68	70	60	55	56	60	64	70	68	56	57	64	61	64	70	70	71	70	71	73	70	66.0
Lakewood	Maximum	81	90	93	94	92	83	75	84	88	90	82	80	85	87	88	83	85	80	78	77	75	77	79	84	83	80	87	91	91	87	84.0
	Minimum	61	66	69	71	71	68	66	67	69	68	67	60	55	57	61	63	70	67	56	55	60	61	65	67	67	69	66	71	72	68	64.9
Moorestown	Maximum	80	93	94	98	95	87	81	87	93	92	85	83	87	90	84	76	87	82	85	84	76	80	86	85	82	86	89	93	94	86	86.2
	Minimum	60	66	70	72	74	68	65	61	70	68	69	59	59	59	61	63	68	66	57	59	63	60	64	68	69	61	69	70	70	69	65.0
Moorestown No. 2	Maximum	81	91	94	96	94	84	80	87	93	93	77	80	86	88	84	77	87	81	81	82	75	78	84	84	82	84	87	92	92	76	84.5
	Minimum	63	67	71	74	74	69	66	68	72	70	71	60	58	59	63	66	71	69	59	59	61	62	66	71	72	71	72	72	72	63	66.7
Pleasantville§§	Maximum	81	90	95	90	89	90	77	83	89	89	88	....	86	88	82	79	86	82	79	79	79	80	81	84	83	83	86	91	94	78	84.9^b
	Minimum	63	66	69	69	70	68	70	70	66	69	70	....	....	56	59	65	65	66	56	53	65	59	62	70	70	71	69	70	72	69	65.9^b
Runyon	Maximum	83	92	95	96	95	90	72	92	93	92	82	82	89	91	89	81	88	84	86	82	76	74	79	84	82	82	82	84	93	78	85.4
	Minimum	62	55	68	68	69	65	68	64	66	68	68	58	50	53	58	56	70	56	60	56	54	60	60	60	65	69	70	70	68	68	62.6
Trenton	Maximum	81	93	94	96	95	81	74	88	93	93	79	80	87	90	87	76	85	81	81	81	70	75	83	86	82	80	86	92	92	78	84.1
	Minimum	65	68	72	75	74	66	64	67	72	72	68	59	62	64	65	66	70	67	60	60	62	61	66	71	71	71	71	71	74	63	66.9
Tuckerton	Maximum	80	95	99	97	94	88	81	84	94	93	79	79	87	88	84	77	88	85	79	79	81	82	82	85	85	83	88	94	95	79	85.7
	Minimum	63	63	70	73	71	70	69	70	70	71	69	59	54	58	60	64	65	66	55	54	65	59	68	70	65	72	68	71	73	70	65.6
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia	Maximum	80	90	93	95	95	86	82	88	93	91	77	82	87	87	83	76	86	82	84	81	75	78	84	86	79	85	86	91	91	78	84.6
	Minimum	69	70	74	78	77	70	67	71	74	74	73	62	68	70	70	66	72	70	64	65	65	64	68	72	73	73	72	73	72	67	69.7
The Sea Coast.																																
Asbury Park	Maximum	82	86	95	93	90	80	80	79	83	81	78	78	82	86	86	82	84	84	79	77	71	72	77	79	80	78	82	88	94	79	82.0
	Minimum	68	70	73	75	73	68	66	68	72	72	71	63	63	66	66	69	71	70	62	63	65	64	69	72	71	70	71	74	75	70	68.8
Atlantic City	Maximum	77	84	85	81	82	86	75	79	83	82	76	75	84	84	78	77	87	85	76	76	77	78	79	80	80	80	80	84	83	79	80.2
	Minimum	70	72	72	72	71	68	69	70	73	73	71	62	61	67	70	66	70	68	64	69	65	64	71	73	73	74	74	74	72	68	69.2
Cape May City	Maximum	80	86	84	80	81	88	82	82	83	82	74	76	84	82	81	78	84	80	78	78	78	80	79	81	82	82	81	85	90	79	81.2
	Minimum	70	70	72	70	70	70	74	72	72	72	71	61	61	63	68	68	70	66	62	63	65	60	66	74	73	71	72	74	75	67	68.5
Long Branch	Maximum	74	81	91	94	93	70	71	75	76	80	74	75	82	85	86	72	87	79	70	75	68	70	72	76	74	75	79	94	95	75	78.6
	Minimum	66	70	72	76	74	67	65	68	71	71	70	61	57	62	63	66	70	71	58	57	62	62	62	71	71	69	70	74	74	67	67.0
Sandy Hook	Maximum	79	87	91	93	91	74	71	77	85	83	78	79	84	88	85	73	84	80	77	74	70	70	74	76	77	77	86	89	89	78	80.4
	Minimum	68	71	74	76	73	76	64	69	70	69	71	64	66	68	69	68	71	72	67	66	61	62	68	71	72	70	72	74	73	67	68.8

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.128	288	.304	.304	.192	.204	.116	.160	.210	.224	....	....	.	.224	.192	.176	.040	.224	.224	.224	.242	.112	.160	.192	.160	.192	.192	.224	.192	.286	.128	^{c}5.514
	Wind movement	33	40	30	46	41	60	52	21	30	45	158	*		127	21	36	67	30	42	55	69	45	25	63	*	101	56	22	21	144	....	^{a}1,480
Runyon	Evaporation	.110	.190	.240	.210	.420	.080	.050	.140	.180	.160	.260	.10	80	.210	.200	.200	.110	.090	.190	.210	.210	010	.050	.150	.040	.020	.170	.180	.210	.220	.020	4.840
	Wind movement	37	21	34	26	15	36	28	22	18	12	22	10	23	26	12	16	23	32	16	23	22	32	16	36	22	20	18	17	20	14	13	774

Note: Evaporation determined by measuring amount returned to pan to mainta tandard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

51.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. SEPTEMBER, 1928. No. 9

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The mean temperature at every station in the State was below normal. Only four cooler Septembers appear in the record, and three of these occurred in the years 1917 to 1924, inclusive. The month averaged nearly 12 degrees cooler than August, 3.0 degrees cooler than last September, and 1.1 degrees warmer than the coolest September, that of 1917. No frosts were reported until the last week of the month, and the frosts were not killing except at two stations in the northern part of the State.

Rainfall averaged nearly an inch above normal, owing to heavy rains along or near the coast. Much of the northern portion had decidedly less rain than normal, while Tuckerton and Atlantic City exceeded monthly normal amounts by more than 6.50 inches.

The greatest deficit of the month was 3.00 inches, at Culver's Lake in the extreme north portion. No station recorded any snow. The heaviest rains of the month, and high winds, attended the approach of a hurricane on the 19th and 20th, which, however, without reaching New Jersey, was deflected into western Pennsylvania, greatly weakened. Many trees were blown down or damaged by the high winds, and crops were damaged heavily by wind and excessive rain.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 62.6°, which was 2.8° below normal, The highest temperature was 90° at Belvidere on the 13th, and the lowest, 29°, at Charlotteburg on the 25th and Layton on the 27th and 28th. The greatest daily range of temperature was 39° at Sussex on the 9th. The highest monthly mean temperature was 65.6° at Atlantic City, and the lowest, 59.7° at Dover.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +0.3°; Red Sandstone Plain, —0.2°; Southern Interior, —0.1°; Sea Coast, 0.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 41 stations, was 4.52 inches, which was 0.95 inch above normal.

The greatest monthly precipitation was 9.62 inches, at Tuckerton, and the least, 1.54 inches at Culvers Lake. The greatest amount of precipitation in any 24 consecutive hours was 4.64 inches at Atlantic City on the 18-19th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or 2 more than normal.

The precipitation accumulated departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +7.93 inches; Red Sandstone Plain, +6.39 inches; Southern Interior, +5.00 inches; Sea Coast, +3.80 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 11 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 72 miles per hour from the northeast at Atlantic City on the 19th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 12, which was 3 less than normal; partly cloudy, 8, which was normal; cloudy, 10, or 3 more than normal. The per cent of possible sunshine was 48, which was 20 per cent below normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 30.05 inches, which was 0.02 inch below normal. The highest reading was 30.43 inches on the 5th at Ridgefield, and the lowest 29.69 inches on the 23d at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 3.4 feet. The highest stage was 6.0 feet on the 4th. At Trenton the mean stage was 1.9 feet, which was 0.8 foot above normal. The highest stage was 3.7 feet on the 5th.

Light hail occurred at Bayonne on the 13th; at Bayonne, Long Branch, and Trenton on the 25th; and at New Brunswick and Hightstown on the 26th. Thunderstorms were reported in various parts of the State on the following dates: 12, 13, 17, 18, 23, 24, 25, 26. Dense fog was noted by one or more observers on the 12th, 17th, and 21st. Dates of high winds noted in the records of observers were 6, 18, 19, 20, 25, 29, 30. An aurora was recorded at Layton on the 9th.

ERRATA.

October 1927. Charlotteburg, mean temperature, 52.8c° should be 52.5b°. Departure, +1.2°, should be +0.9°. Lowest, 26° on the 11th, should be 24° on the 31st. Mean minimum temperature, 40.4c°, should be 39.8b°.

November 1927. Bridgeton, monthly mean temperature, 50.2b°, should be 50.6b°. Departure, +4.6° should be +5.0°. Highest, 83° on the 2d, also highest for the State. Mean maximum temperature, 59.7d° should be 60.5c°.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec,
1885	64.2	93	38	0.83	1.69	0.25	......	......	......	......
1886	66.9	95	36	1.13	1.76	0.86	......	......	......	......
1887	61.6	90	30	3.66	6.25	1.62	......	......	......	7
1888	63.1	*84*	29	7.09	10.65	**3.75**	......	......	14	12
1889	64.8	90	34	**8.36**	**13.13**	3.17	......	......	14	14
1890	64.4	91	33	4.75	8.61	2.59	10	10	10	10
1891	68.7	95	**39**	2.46	5.91	0.90	16	9	5	6
1892	64.2	90	33	1.81	3.78	1.02	15	11	4	6
1893	62.7	90	31	3.20	5.38	1.93	12	10	8	8
1894	68.8	97	31	7.46	11.65	3.69	10	10	10	8
1895	69.7	**109**	29	1.07	2.71	0.22	17	10	3	5
1896	65.1	95	30	4.37	8.74	2.26	19	7	4	5
1897	65.5	99	30	1.65	3.97	0.21	19	7	4	5
1898	68.6	100	31	2.00	3.87	0.65	17	8	5	6
1899	64.4	93	30	5.88	9.61	2.88	15	9	6	9
1900	69.9	98	32	2.86	7.37	1.09	14	10	6	6
1901	66.8	94	29	3.38	6.82	1.63	15	9	6	10
1902	64.6	93	30	5.65	8.95	3.11	11	7	12	13
1903	65.0	92	29	3.34	7.10	1.39	17	8	5	7
1904	64.8	93	*23*	4.79	10.08	0.89	14	10	6	7
1905	65.4	90	28	5.23	9.18	2.87	16	7	7	8
1906	68.9	94	33	2.19	4.66	0.75	15	9	6	7
1907	67.1	92	31	8.08	12.95	3.55	10	8	12	14
1908	65.7	90	29	2.09	4.13	0.95	11	10	9	3
1909	64.5	89	30	3.30	4.58	2.08	11	10	9	8
1910	67.3	97	32	2.39	3.97	1.01	12	10	8	6
1911	66.4	90	30	2.88	5.33	1.08	10	12	8	9
1912	65.9	87	28	4.47	6.76	2.68	12	7	11	10
1913	64.4	96	27	3.87	6.55	1.56	13	8	9	9
1914	64.0	99	24	*0.37*	*1.64*	*0.14*	21	6	3	3
1915	68.5	97	30	2.08	4.46	0.55	17	9	4	5
1916	65.2	98	31	2.84	5.29	1.29	20	7	3	6
1917	*61.5*	87	27	2.74	6.13	0.47	16	7	7	6
1918	62.2	90	29	3.84	6.00	2.66	14	8	8	9
1919	65.8	96	32	3.26	6.28	1.04	16	6	8	8
1920	66.8	90	30	3.87	8.53	1.67	17	8	5	7
1921	**70.2**	99	36	2.35	5.04	0.80	15	8	7	8
1922	66.7	95	27	2.26	5.22	0.59	19	5	6	4
1923	67.0	90	28	3.78	6.26	2.24	14	8	8	7
1924	62.2	99	29	5.42	8.44	2.47	13	8	9	10
1925	67.8	96	25	2.92	5.81	0.64	11	11	8	7
1926	64.5	93	32	4.18	7.09	1.53	14	6	10	10
1927	65.6	97	29	2.66	5.03	0.65	19	6	5	5
1928	62.6	**90**	29	4.52	9.62	1.54	12	8	10	10

W. B. O. Philadelphia-10-23-28-810.

Climatological Data for September, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	62.4[a]	−2.3	90[a]	13	35[a]	25†	33[a]	2.97	−0.80	0.87	0	9	13[a]	8[a]	8[a]	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	60.8	−1.1	85	12†	29	25	37	3.06	−1.36	1.04	0	10	1	6	23	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	34	27	....	1.54	−3.00	0.82	0	12	19	3	8	e.	Brice E. Riker.
Dover	Morris	600	44	59.7	−2.5	84	13	33	25	31	3.22	−0.87	1.26	0	10	1	21	8	......	William C. Harris.
Layton	Sussex	480	27	59.8	−2.5	85	12†	29	27†	32	2.41	−1.51	1.72	0	6	12	2	16	s.	A. M. Depue.
Newton	Sussex	769	44	61.8[b]	−1.7	87[b]	11†	35[b]	24†	35[b]	2.04	−1.77	0.50	0	10	12[b]	9[b]	7[b]	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	62.4	−2.8	88	13	36	27	33	2.24	−1.42	0.51	0	9	18	6	6	......	Town Engineer.
Sussex	Sussex	442	33	61.2[b]	−3.0	87[b]	12	31[b]	27	39[b]	1.90	−2.00	0.89	0	5	15[b]	7[b]	6[b]	w.	A. J. W. Mowatt
Means and extremes	......	......	....	61.2	−2.3	90	13	29	25†	39	2.42	−1.59	1.72	0	9	10	8	12	w.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	......	......	......	......	......	......	....	3.71	+0.18	1.07	0	9	16	8	6	sw.	William Mann.
Boonton	Morris	400	§38	60.3	−3.3	84	9†	30	27	34	3.43	−0.70	1.05	0	11	15	0	15	nw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	....	5.09	+0.80	1.20	0	10	18	7	5	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	63.6	−3.1	86	9†	35	27	34	4.45	+0.68	1.04	0	9	17	9	4	sw.	Union County Park Com
Flemington	Hunterdon	140	§42	62.8	−3.5	88	13	33	27	31	3.47	−0.43	0.89	0	8	17	5	8	w.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	61.2	−2.5	83	13	36	25	28	3.33	−0.59	1.46	0	9	12	4	14	sw.	Charles J. Bates.
Jersey City	Hudson	10	30	64.7	−2.5	87	13	42	27	23	3.53	+0.18	1.19	0	9	12	14	4	sw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	61.6	−4.2	86	13	36	27	31	4.18	+0.29	1.84	0	11	16	5	9	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	62.8	−1.3	88	13	33	27	29	4.63	+1.05	1.61	0	11	12	8	10	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	63.6	−2.0	86	13	36	25†	28	4.46	+0.86	1.16	0	8	11	14	5	sw.	N. J. Experiment Station.
New Milford‡‡††	Bergen	9	10	63.5	......	89	13	37	27	34	2.77	......	1.02	0	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	63.8	−2.4	87	11	39	27	30	4.07	−0.06	1.38	0	9	16	5	9	sw.	Marion T. Probert.
Plainfield	Union	120	40	62.4	−3.2	88	13	33	27	33	4.47	+0.10	1.35	0	10	8	14	8	sw.	E. D. Pearson.
Ridgefield	Bergen	80	11	62.7	......	87	13	37	25	29	3.16	......	1.33	0	9	9	11	10	sw.	George P. Kirsten.
Somerville	Somerset	70	45	61.8	−4.2	89	13	31	27	33	3.42	−0.23	0.70	0	9	13	12	5	w.	Arthur Gerlich.
South Orange	Essex	200	58	63.2	−0.9	88	13	33	27	31	5.03	+1.22	1.20	0	8	12	6	12	w.	Everett W. Bird.
Verona	Essex	490	2	60.4	......	82	13	38	25†	25	4.38	......	1.30	0	12	7	10	13	sw.	Luther Davis.
Woodcliff Lake‡‡††	Bergen	100	10	......	......	......	......	......	......	....	3.20	......	1.10	0	9	...	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	63.8	−3.0	84	13	43	27	21	3.36	−0.03	1.40	0	11	7	13	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	62.5	−2.8	89	13	30	27	34	4.05	+0.24	1.84	0	10	13	8	9	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	61.8[a]	−4.7	89[a]	13	30	25†	38	6.94	+3.55	2.23	0	11	8[c]	9[c]	10[c]	w.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§42	63.8	−3.0	87	12†	35	27	28	3.69	+0.18	1.24	0	9	10	9	11	ne.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Hightstown	Mercer	120	34	63.3	−3.5	89	13	34	27	33	4.91	+1.78	1.19	0	9	14	8	8	w.	Charles Welsh.
Imlaystown	Monmouth	115	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	w.	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	63.0	−3.1	89	12†	33	27	32	5.96	+2.05	2.00	0	10	11	6	13	ne.	James M. Armstrong.
Lakewood	Ocean	54	24	61.6	−3.0	85	13	33	27	29	6.47	+3.68	2.40	0	9	12[b]	3[b]	13[b]	sw.	R. W. Holman.
Moorestown	Burlington	75	65	63.6	−2.4	88	13	37	27	32	4.61	+0.98	1.75	0	8	13	7	10	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	63.1	......	87	13	39	25†	31	4.49	......	0.91	0	9	12	9	9	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	....	7.67	+5.17	3.36	0	12	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	62.4	......	87	13†	30	25†	36	8.46	+5.34	2.20	0	12	13	9	8	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	61.3	......	88	12	30	25†	35	4.34	......	1.35	0	7	12	12	6	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	63.3	−3.6	86	13	41	27	26	3.42	−0.17	1.06	0	9	7	9	14	sw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	64.1	−2.1	88	13	36	25†	31	9.62	+6.56	4.00	0	13	9	6	15	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	H. C. Himes
Philadelphia, Pa	......	117	57	65.4	−2.6	86	13	44	27	22	3.61	+0.47	1.30	0	9	6	11	13	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	62.8	−3.2	89	12†	30	25†	38	5.88	+2.91	4.00	0	10	11	8	11	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	64.2[g]	−2.6	87[g]	11	40	27	27[g]	4.66	+1.67	1.76.	0	8	18	6	6	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	65.6	−1.2	82	9	44	25	24	9.16	+6.51	4.64	0	11	10	8	12	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	65.0	−4.0	82	13	43	27	21	6.72	+3.72	2.62	0	11	9	7	14	n.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	61.2	−4.7	85	9	38	27	30	5.99	+2.93	2.70	0	11	12	9	9	sw.	William D. Martin.
Sandy Hook	Monmouth	22	30	64.6	−2.5	83	13	45	27	20	4.08	+0.58	1.29	0	10	7	8	15	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	64.1	−3.0	87	11	38	27	30	6.12	+3.08	4.64	0	10	11	8	11	sw.	
For the State	......	......	....	62.6	−2.8	90	13	29	25†	39	4.52	+0.95	4.64	0	10	12	8	10	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for September, 1928

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.55			.40	.02						.87						.32		T.					.38	T.	.02	.03	.38		2.97
Charlotteburg	Passaic			.66	.02		.22								.04					.55	1.04						.22		.07	.07	.17		3.06
Culvers Lake	Delaware			.82	.07		.05	.01						T.	.01				.02	.25	.15	T.				.01	.12		.01		.02		1.54
Dover	Passaic			.47			.34							.71				.06		.68	.58					.15		.06		*	.17		3.22
Layton	Delaware			1.72			.03	T.											.15	.25	.21								T.		.05		2.41
Newton	Delaware			.50			.33	.03					.05						.20	.40	.28			.01			.12				.12		2.04
Phillipsburg	...do			.51			.45	.09						.13				T.		.38	.41					.05	T.	T.	T.	.11	.11		2.24
Sussex	Hudson			.89			.07	.05												.45	.44												1.90
The Red Sandstone Plain.																																	
Bayonne	Coast		.07	.74			.60	.01						.82			.04			1.07		T.				.22			T.	.14			3.71
Boonton ‖	Passaic			1.05	.20		.09	.36							.16				T.	.36	.95						.08		.02		.16		3.43
Chatham ‖	...do		.90	.34			.24	.61	.08						.90	T.				.43	1.20						.18				.21		5.09
Elizabeth	Coast			1.04			.63	.01						.96						.89	.28					T.	.14		T.	.10	.40		4.45
Flemington	Raritan			.45			.89	.04						T.						.57	.77	T.				T.	.19			.28	.28		3.47
Highwood	Hackensack			.85			.39	.04									.08		T.	1.08	.38						.17		.03	T.	.31		3.33
Jersey City	Coast			.60			.50	.01						.20			T.	T.		1.19	.40					T.	.19			.09	.35		3.53
Lambertville	Delaware			.40			.86	.05											.06	.80	1.04					.02	.17		.03	.35	.40		4.18
Little Falls ‖	Passaic			1.19	.17		.14	.36							.04				.31	.44	1.61						.12		.02		.23		4.63
New Brunswick	Raritan			.72			.77	.03						T.			T.			1.16	.65	T.	T.			T.	.33			.18	.62		4.46
New Milford.**	Hackensack			.65			.33	.03											.10	1.02	.24					.17			.01		.22		2.77
Paterson	Passaic			1.38			.47		.02										.28	1.06	.41						T.	.15	.03	T.	.27		4.07
Plainfield	Raritan			1.07			.71							.61			.01	T.		1.12	.23					T.	.21		.01	.06	.44		4.47
Ridgefield	Hackensack			.75			.39	T.						.02		.02	T.	.02		*	1.33	T.		T.		*	.20			*	.42		3.16
Somerville	Raritan			.63			.70	.07						.05						.67	.61						.20			.25	.24		3.42
South Orange	Rahway			.98			.60	.05						1.20						1.04	.58						.26				.32		5.03
Verona**	Passaic		.08	1.30			.59	.01						.06				.02	T.	1.27	.57			T.		.18			.01	.09	.20		4.38
Woodcliff Lake**	Hackensack			.88			.38							.04						1.10	.31						.16	.03		.10	.20		3.20
New York, N. Y***	Coast		T.	.56			.48	.01						.22			T.		.01	2.26	.21					.17	.01			.09	.34		3.36
The Southern Interior.																																	
Belleplain	Tuckahoe			1.07		*	1.75		.02				.03		.08				2.23		.62			.22			.08				.84		6.94
Bridgeton	Coast																																
Burlington	Delaware			.32			1.24	.06	T.					T	.01					.80	.43						.10			.15	.58		3.69
Clayton	Delaware																																
Hammonton	Mullica																																
Hightstown	Raritan			.50			1.07	.07									.08	T.		1.19	.83					T.	.43			.12	.62		4.91
Imlaystown	Delaware																																
Indian Mills	Mullica			.48		.03	2.00	.03					.43	T.						1.72	.22			T.			.30			.13	.62		5.96
Lakewood	Metedeconk			.48		T.	1.85	.14						T.				.09		2.40	.48					T.	.08			.13	.82		6.47
Moorestown	Delaware			.25		T.	1.75	T.					.45							1.10	.25						.03			.20	.58		4.61
Moorestown No. 2	Delaware			.29			.91	.83	.01					.28					T.	.72	.58						.03				.84		4.49
Northfield	Coast			.35		.02	2.22	.10							.02				.67	3.36	.03			.05			.12			.05	.68		7.67
Pleasantville ‖	Coast			.30			1.33	.85	.01									.20	1.08	2.20	1.69				.11		.12			T.	.57		8.46
Runyon	...do			.42			.82													1.35	.62						.30			.14	.69		4.34
Trenton***	Delaware		T	.30		T.	1.06	T.				T.	T.	T.			.01		.06	.99	.16					.24		T.		.30	.30		3.42
Tuckerton	Coast			1.13			2.01	.63	.04						.02			.12	.29	4.00	.33			.22			.08			.05	.70		9.62
Vineland	Maurice																																
Phila., Pa***	Delaware		.01	.23		.01	1.29	T.					T.	T.				T.	.15	1.02						.06				.48	.36		3.61
The Sea Coast.																																	
Asbury Park	Coast			.62			1.43	.06					T						T.	1.76	.07						.06			.14	.52		4.66
Atlantic City***	...do			.37		.29	2.03	.01	T.					.01			T.		1.31	4.34	T			.02		.18				.14	.46		9.16
Cape May City	...do		T.	.22		.10	2.62	.02					.14	T.					.55	2.30	.02			T.			.08	T.		.10	.57		6.72
Long Branch	...do			.50		.07	1.50	.09					.02	T.					.07	2.70	.09					.20				.15	.60		5.99
Sandy Hook***	...do		T.	.56		T.	.65	.02				T.	T.	.52					.04	1.27	.09					.23		T.	T.	.15	.55		4.08

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sun shine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.04	30.40	5	29.71	23	15.5	72	ne.	19	81	67	80	45
ong Branch	30.05	30.41	5	29.72	3					79	66	80	
oorestown No. 2										87	63	87	
ew York, N. Y	30.06	30.42	5	29.74	3	12.7	43	nw.	26	76	62	71	69
hiladelphia, Pa	30.07	30.45	5	29.74	23	9.7	48	ne.	19	77	60	69	55
idgefield	30.06	30.43	5	29.74	3								
andy Hook	30.04	30.40	5	29.69	23	13.5	52	ne.	19	77	64	73	50
renton	30.05	30.41	5	29.70	23	8.9	39	ne.	19	81	64	77	47
erona	30.06	30.40	5	29.70	3	5.4	25	ne.	19	81	60	83	49

Daily Temperatures for September, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	75	79	81	79	69	65	66	78	89	84	87	89	90	83	76	83	82	77	64	....	72	76	76	67	63	58	63	64	54	57	....	74.0ª
	Minimum	51	46	55	59	46	55	56	53	58	58	60	60	68	53	54	63	65	56	50	....	36	53	43	42	35	37	35	43	39	46	....	50.9ª
Charlotteburg	Maximum	71	70	76	77	71	68	69	77	83	82	82	85	85	79	73	80	83	79	63	78	77	73	72	72	64	57	58	59	57	55	....	72.5
	Minimum	48	39	55	61	50	48	55	45	62	55	59	56	62	58	50	60	58	54	50	54	48	48	35	37	29	38	45	42	32	44	....	49.2
Dover	Maximum	72	72	75	74	66	58	67	74	81	73	81	73	84	75	68	78	79	69	60	77	71	68	73	63	55	55	59	58	49	53	....	69.0
	Minimum	51	54	61	57	48	55	55	54	50	57	61	62	66	57	53	51	61	55	51	56	51	47	40	41	33	37	34	39	36	39	....	50.4
Layton	Maximum	72	74	78	75	69	60	65	75	82	80	81	85	85	76	67	81	70	69	60	78	71	78	71	60	60	56	60	58	52	59	....	70.2
	Minimum	45	44	56	59	45	53	56	52	50	54	63	59	68	60	50	62	60	54	49	52	54	50	40	36	33	39	29	29	39	40	....	49.3
Newton	Maximum	69	80	80	81	78	74	68	77	83	84	87	86	86	81	78	....	87	76	59	78	72	72	61	62	....	54	60	59	51	57	....	72.9ᵇ
	Minimum	49	45	60	62	60	48	54	50	50	59	60	68	58	55	53	....	64	54	48	50	53	44	43	35	....	39	35	42	38	43	....	50.7ᵇ
Phillipsburg	Maximum	73	75	87	75	68	61	65	75	84	78	83	86	88	80	71	82	80	68	63	77	74	71	75	62	58	59	63	62	51	59	....	71.8
	Minimum	54	48	65	58	51	56	57	55	51	59	63	60	67	59	55	64	64	57	53	58	55	49	45	44	37	41	36	44	41	41	....	52.9
Sussex	Maximum	72	76	79	78	70	62	68	77	85	....	82	87	86	76	70	83	83	76	59	81	....	73	73	63	61	58	61	61	68	60	....	72.4ᵇ
	Minimum	45	52	42	61	47	54	56	49	46	....	52	59	68	59	54	62	60	56	49	52	....	51	39	37	57	40	31	39	35	45	....	50.0ᵇ
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	73	75	78	76	68	61	72	78	84	78	80	83	84	76	69	79	79	67	65	81	73	70	73	63	59	56	60	59	53	58	....	71.0
	Minimum	51	44	50	61	52	54	55	55	52	55	58	57	62	61	53	60	61	55	51	51	52	51	39	41	33	37	30	33	35	39	....	49.6
Elizabeth	Maximum	76	77	80	77	70	64	70	79	86	76	85	86	86	78	70	75	84	76	64	83	78	72	75	67	61	58	65	62	57	60	....	73.2
	Minimum	54	49	67	64	53	55	56	57	52	62	59	63	66	61	60	63	65	60	53	59	55	54	45	45	37	42	35	46	43	41	....	54.0
Flemington	Maximum	71	77	79	75	68	64	68	78	85	81	83	87	88	78	72	84	80	77	62	80	77	73	74	66	60	56	63	61	53	57	....	72.6
	Minimum	53	47	64	63	51	55	55	56	54	61	62	60	69	61	56	60	65	57	52	57	52	54	43	45	36	40	33	44	41	47	....	53.1
Highwood	Maximum	70	72	75	72	65	61	68	74	80	71	78	82	83	73	68	74	79	73	62	76	72	67	71	61	57	55	59	57	54	55	....	68.8
	Minimum	53	47	66	64	51	56	57	55	52	60	59	62	71	60	58	63	66	60	52	57	56	46	47	44	36	40	37	45	38	47	....	53.5
Jersey City	Maximum	75	75	78	76	70	60	72	74	84	74	84	85	87	77	69	80	81	70	62	81	75	71	75	67	62	58	62	58	57	55	....	71.8
	Minimum	59	59	66	60	57	57	59	60	61	63	64	65	69	63	61	65	65	59	55	61	60	58	55	50	46	43	42	47	50	48	....	57.6
Lambertville	Maximum	70	78	76	72	66	60	65	74	82	77	83	85	86	79	73	82	82	66	60	76	74	69	70	61	59	55	61	59	51	55	....	70.2
	Minimum	53	47	64	63	50	53	54	56	55	61	61	63	69	59	55	62	59	56	52	56	54	56	46	45	38	39	36	41	42	47	....	53.1
Little Falls§§	Maximum	76	75	79	78	69	62	71	82	85	78	82	86	88	78	73	83	82	69	70	79	75	72	75	65	58	57	62	61	55	56	....	72.7
	Minimum	53	49	61	64	50	56	56	54	58	60	58	60	68	60	56	62	62	57	52	52	54	53	47	45	36	42	33	45	38	42	....	52.8
New Brunswick	Maximum	75	74	78	77	71	64	69	77	83	82	83	85	86	81	74	80	84	79	64	81	77	72	71	67	60	56	62	61	56	55	....	72.8
	Minimum	55	49	67	64	52	55	56	59	55	61	60	62	71	62	58	60	67	59	53	59	55	55	46	47	36	41	36	42	43	48	....	54.4
Paterson	Maximum	74	74	77	75	69	64	70	77	90	78	87	85	86	79	70	78	79	77	65	78	74	70	74	70	60	57	61	61	56	56	....	72.4
	Minimum	50	51	64	65	54	57	58	56	60	62	62	62	71	60	61	64	65	58	53	57	57	57	47	47	41	42	39	47	43	49	....	55.3
Plainfield	Maximum	75	75	79	76	70	60	72	74	84	74	85	85	88	87	69	81	81	70	62	82	75	71	75	67	62	58	62	59	57	56	....	72.0
	Minimum	54	46	64	63	51	56	57	55	51	57	63	62	70	60	59	60	60	59	51	56	52	53	42	42	34	40	33	40	50	47	....	52.9
Ridgefield	Maximum	72	74	79	76	69	59	72	80	84	76	82	85	87	78	68	74	81	67	59	78	76	73	73	68	58	57	62	62	56	56	....	71.4
	Minimum	54	49	67	58	52	56	58	55	55	59	61	65	67	59	61	63	66	58	52	58	57	56	47	42	37	40	38	42	41	46	....	54.0
Somerville	Maximum	74	77	81	76	69	62	70	79	83	79	86	86	89	79	71	78	82	76	61	81	78	70	75	65	60	59	64	62	54	58	....	72.8
	Minimum	52	46	51	53	49	55	56	51	53	61	60	60	59	58	56	60	64	58	53	54	51	51	48	41	34	38	31	40	40	41	....	50.8
South Orange	Maximum	76	75	81	77	71	67	70	80	84	84	85	85	88	82	78	78	83	79	63	81	78	74	74	66	60	58	63	62	57	57	....	73.9
	Minimum	53	46	63	63	50	56	56	57	55	59	58	60	70	56	55	61	65	58	52	56	52	52	43	41	34	39	33	45	40	47	....	52.5
Verona	Maximum	70	70	76	72	66	58	68	74	80	71	80	81	82	72	66	75	78	72	57	76	71	66	70	60	56	54	59	57	52	54	....	68.1
	Minimum	54	48	63	59	51	57	56	57	55	60	60	64	66	58	58	62	60	57	51	58	56	48	48	40	38	38	39	40	40	40	....	52.7
New York, N. Y.	Maximum	72	72	75	74	68	62	70	75	82	73	81	84	84	74	67	77	79	69	61	74	73	69	70	64	61	55	60	58	56	54	....	69.8
	Minimum	59	59	67	61	57	58	59	60	61	63	64	66	70	63	61	65	65	59	55	61	60	58	55	50	46	43	43	48	50	49	....	57.8
The Southern Interior.																																	
Belleplain	Maximum	78	76	77	78	68	63	64	80	87	78	84	87	89	86	74	83	82	62	65	....	81	78	64	68	65	61	64	68	54	56	....	73.1ª
	Minimum	58	42	67	64	48	49	55	56	49	53	57	65	67	54	47	49	65	55	54	46	67	48	38	43	30	39	30	30	39	48	....	50.4
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	70	78	78	76	73	64	65	76	78	82	83	87	87	84	80	81	85	82	65	80	77	76	71	71	63	58	63	62	60	54	....	73.6
	Minimum	56	50	65	63	54	53	56	60	51	62	61	63	70	62	56	62	65	60	55	60	52	52	43	47	36	43	35	42	44	43	....	54.0
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	77	78	80	78	70	65	69	78	84	80	86	88	89	80	75	80	84	78	64	81	79	75	73	68	64	58	66	63	59	57	....	74.2
	Minimum	52	46	66	64	50	54	56	54	51	59	57	62	70	52	52	61	66	57	54	58	54	54	42	42	35	40	34	41	41	48	....	52.4
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	73	79	80	74	65	62	63	77	83	80	85	89	89	79	76	77	85	77	63	81	80	70	69	66	64	58	65	62	53	54	....	72.6
	Minimum	55	47	68	64	50	50	57	57	52	59	63	68	70	58	55	59	65	59	55	60	51	50	41	46	35	42	33	40	42	50	....	53.4
Lakewood	Maximum	73	74	77	74	70	62	64	75	80	76	82	84	85	80	73	79	81	75	64	77	75	75	69	62	62	58	61	59	55	53	....	71.1
	Minimum	55	47	60	64	50	54	57	55	51	58	57	61	69	57	54	57	64	59	55	60	50	52	40	45	34	40	33	41	40	46	....	52.2
Moorestown	Maximum	76	82	79	76	65	61	65	79	85	83	85	87	88	82	75	83	86	75	60	80	79	73	73	67	61	59	65	65	55	54	....	73.4
	Minimum	54	50	65	62	51	50	55	58	54	59	61	62	68	60	57	60	65	58	52	58	56	56	45	46	38	40	37	41	47	47	....	53.7
Moorestown No. 2	Maximum	73	78	80	77	66	59	65	78	85	79	84	85	87	80	75	81	86	65	65	80	77	71	72	64	61	58	64	63	52	54	....	72.1
	Minimum	55	51	68	59	52	52	57	59	54	62	64	62	69	58	55	63	66	57	54	61	56	51	47	43	39	40	39	42	46	43	....	54.1
Pleasantville§§	Maximum	74	75	80	76	67	65	66	75	83	75	83	83	87	87	87	79	80	64	70	78	80	71	68	65	66	66	64	64	58	55	....	73.0
	Minimum	55	49	56	66	51	50	55	60	51	51	61	61	61	57	53	53	66	57	56	68	53	53	41	47	30	30	34	45	40	48	....	51.9
Runyon	Maximum	80	76	78	76	70	62	68	81	85	82	81	88	87	85	71	81	86	76	68	82	78	77	70	70	62	62	61	64	62	58	....	74.2
	Minimum	45	43	65	60	45	47	53	53	45	54	50	55	70	58	53	57	56	48	58	58	48	52	37	40	30	30	31	34	38	38	....	48.4
Trenton	Maximum	72	76	78	74	67	59	66	75	82	77	83	86	86	80	72	80	83	66	64	80	76	69	70	61	60	55	62	59	55	54	....	70.9
	Minimum	57	53	67	60	55	54	56	60	56	63	64	66	69	62	59	63	64	57	53	62	57	54	50	46	42	41	41	46	47	46	....	55.7
Tuckerton	Maximum	76	79	78	77	69	62	65	78	85	77	86	87	88	83	76	78	83	73	65	78	79	75	74	68	66	65	67	66	58	56	....	73.9
	Minimum	54	50	68	65	50	50	60	58	55	60	64	66	69	57	55	69	66	57	55	60	53	55	45	44	36	39	36	42	44	48	....	54.3
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia	Maximum	72	78	78	75	66	60	66	76	84	81	82	84	86	81	76	79	83	68	66	77	77	71	72	62	60	57	63	61	55	56	....	71.7
	Minimum	61	60	69	64	59	54	58	61	62	66	66	68	72	65	62	66	67	58	55	64	60	59	56	51	46	45	44	51	51	51	....	59.0
The Sea Coast.																																	
Asbury Park	Maximum	74	76	79	79	69	64	66	75	84	77	87	....	....	....	....	....	....	....	66	75	76	72	73	67	66	59	60	61	59	58	....	70.5
	Minimum	59	55	71	65	55	58	62	60	57	66	65	67	71	60	65	62	63	62	57	63	59	59	52	50	42	43	40	46	49	52	....	57.8
Atlantic City	Maximum	71	74	76	78	67	65	67	74	82	74	78	79	82	81	71	76	79	73	71	75	76	73	67	65	64	58	63	63	61	58	....	71.4
	Minimum	60	60	71	64	54	54	63	61	58	65	69	71	72	65	63	69	70	60	59	67	62	59	56	49	44	44	46	50	54	52	....	59.7
Cape May City	Maximum	73	77	78	74	66	65	68	75	78	78	80	80	82	77	77	79	77	71	70	75	76	71	71	64	62	59	64	64	62	57	....	71.7
	Minimum	59	57	71	62	55	53	62	62	59	64	66	70	71	66	60	69	70	59	60	65	58	52	51	50	44	45	43	49	48	49	....	58.3
Long Branch	Maximum	63	73	72	70	60	60	61	75	85	70	84	78	76	70	67	70	76	65	63	69	67	64	71	61	63	58	54	54	56	56	....	67.0
	Minimum	57	50	69	62	53	56	56	59	55	63	60	66	70	59	64	64	65	60	56	63	55	52	45	47	39	42	38	42	44	49	....	55.3
Sandy Hook	Maximum	70	72	77	75	67	62	66	77	80	70	82	83	83	75	68	75	78	67	64	73	75	69	69	63	61	56	61	60	57	54	....	69.6
	Minimum	62	62	70	64	59	58	61	63	60	64	64	68	67	65	63	67	67	60	56	64	61	61	58	54	49	46	45	51	53	50	....	59.7

ª, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville••	Evaporation	.064	.236	*	.032	.018	.050	.002	.128	.160	.144	.160	.160	.128	.224	.128	.104	.184	.008	.010	.192	.112	.128	.094	.160	.120	.160	.096	.128	*	.004	....	3.1
	Wind movement	34	55	33	*	59	64	38	21	20	47	38	44	37	81	22	36	40	131	148	22	24	34	28	45	49	54	71	45	100	77	....	1,4
Runyon	Evaporation	.180	.180	0	.160	....	.060	.060	.150	.140	.120	.180	.160	.120	.180	.120	.120	.090	.060	.150	.020	.150	.180	.150	.120	.100	.040	.150	.160	0	.040	....	*3.3
	Wind movement	15	15	29	15	15	13	14	8	10	16	34	17	30	24	32	12	16	22	130	154	14	14	27	22	12	37	34	38	43	32	....	9

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followi record. ••Observations taken in the morning, and entered on preceding day.

1.05
N.J

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

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UNIVERSITY OF ILLINOIS

VOL. XXXIII. OCTOBER, 1928. No. 10

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

While the month of September was considerably below normal in temperature and above normal in precipitation, allowing it to be characterized as a cool and wet month, October was relatively warm and dry. October averaged only 6.5° cooler than September this year. The normal difference between these months is 10.4°. The month was 7.0° warmer than the coolest October in the record, and 3.8° cooler than the warmest October. The highest temperature of the month occurred on the 12th fairly generally, but on the 13th or 17th at a number of stations. Lowest temperatures were registered on the 27th and 30th.

The monthly average precipitation was the lowest for the month since October, 1924, when the minimum monthly amount in the record was recorded. Each of the four divisions of the State was below normal in precipitation, and above in temperature. Snowfall amounted to a trace only. While heavy to killing frosts occurred in exposed localities in the north earlier in the month, the first killing frost did not occur generally in the interior until the 26th or 27th. On the coast no killing frost occurred at Sandy Hook, but the other stations reported one on the 27th or 30th or both dates.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 56.1°, which was 1.3° above normal. The highest temperature was 90° at Little Falls on the 12th, and the lowest, 16°, at Belleplain on the 30th. The greatest daily range of temperature was 45° at Runyon on the 8th, and at Layton on the 11th. The highest monthly mean temperature was 59.4° at Asbury Park, and the lowest, 53.0° at Boonton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +0.5°; Red Sandstone Plain, —0.1°; Southern Interior, 0.0°; Sea Coast, +0.1°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 40 stations, was 1.19 inches, which was 2.56 inches below normal. The average snowfall for the State was a trace.

The greatest monthly precipitation was 2.58 inches, at Hightstown, and the least, 0.24 inches at Asbury Park. The greatest amount of precipitation in any 24 consecutive hours was 1.46 inches at Hightstown on the 20th. The mean of the number of days on which 0 01 inch or more of precipitation fell was 6, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1928, to date, by sections, is: The Highlands, +4.79 inches; Red Sandstone Plain, +3.83 inches; Southern Interior, +2.96 inches; Sea Coast, +1.10 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 37 miles per hour from the southwest at Sandy Hook on the 9th. Strong winds occurred along the coast on the 9th, 18th, and 28th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 17, which was 2 more than normal; partly cloudy, 9, or 1 more than normal; cloudy, 5, or 3 less than normal. The per cent of possible sunshine was 73, which was 10 per cent above normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 30.14 inches, which was 0.07 inch above normal. The highest reading was 30.59 inches on the 30th at Verona and the lowest was 29.61 inches on the 24th at Ridgefield.

The mean stage of the Delaware River at Phillipsburg was 1.3 feet. The highest stage was 2.0 feet. At Trenton the mean was 0.7 foot, which was 0.7 foot below normal. The highest stage was 1.0 foot.

Light hail occurred at Trenton on the 19th; at Culvers Lake and Newton on the 25th; and at Charlotteburg on the 27th. Thunderstorms were reported from most stations throughout the State on either the 18th, 19th, or 20th. Dense fog was noted by one or more observers on some of the following dates: 3, 4, 5, 12, 15, 19, 23. Auroras were recorded at Layton and Ridgefield on the 24th.

ERRATA.

January 1928. Lambertville, total snowfall, 9.5 inches should be 10.2 inches.

March 1928. Ridgefield, lowest temperature, 16° on the 4th should be 15° on the 6th.

April 1928. South Orange, total precipitation, 4.50 inches should be 4.94 inches. Departure, +0.93 inch should be +1.37 inches.

May 1928. Belleplain, total precipitation, 3.28 inches should be 3.37 inches. Departure, −0.54 inch should be −0.45 inch.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	54.2	82	**29**	4.20	5.85	2.91	.....	.....	.....	.....
1886	55.6	88	21	3.22	8.16	2.02	.....	.....	.....	.....
1887	52.3	89	21	2.61	5.00	1.58	.....	.....	.....	7
1888	49.2	*73*	25	4.73	7.00	2.97	.....	.....	10	12
1889	50.8	82	23	3.80	5.03	2.42	.....	.....	12	11
1890	53.9	81	24	6.33	10.18	3.40	9	8	14	13
1891	52.8	92	18	3.44	5.57	1.88	11	11	9	8
1892	53.6	85	21	0.52	*1.09*	0.04	14	12	5	4
1893	55.2	85	17	4.22	6.59	1.74	15	7	9	7
1894	55.3	87	27	5.67	8.23	3.90	12	7	12	10
1895	49.9	83	18	3.60	5.53	1.62	19	7	5	5
1896	51.5	82	21	2.24	4.58	1.72	11	8	12	8
1897	55.8	**95**	22	2.43	6.49	0.87	14	8	9	7
1898	56.5	88	24	5.76	8.42	3.92	13	9	9	10
1899	56.6	86	18	2.72	4.65	1.07	13	10	8	6
1900	**59.9**	92	19	3.70	6.59	1.47	10	8	13	10
1901	54.4	82	21	1.93	4.45	0.87	17	8	6	4
1902	56.0	80	20	6.39	9.35	3.82	15	7	9	8
1903	55.9	86	24	**8.92**	**16.19**	4.17	13	9	9	8
1904	51.9	89	15	3.78	7.01	1.50	20	6	5	5
1905	55.5	90	17	2.71	4.83	0.75	18	7	6	7
1906	55.0	80	*11*	4.46	7.14	2.66	8	9	14	11
1907	50.6	80	18	4.46	7.18	2.70	22	5	4	7
1908	57.3	92	19	2.71	5.14	1.30	15	5	11	8
1909	51.2	84	18	1.18	1.82	0.40	17	7	7	8
1910	57.2	90	18	3.15	5.55	1.55	15	8	8	7
1911	53.9	80	18	5.49	8.23	2.61	10	9	12	12
1912	57.0	88	25	3.30	6.95	1.72	17	8	6	5
1913	57.8	83	25	7.79	13.84	2.70	12	9	10	11
1914	58.1	88	19	1.99	3.08	0.90	13	9	9	5
1915	56.2	84	23	3.03	5.18	1.89	17	7	7	9
1916	55.1	92	23	1.37	2.38	0.51	18	8	5	4
1917	50.7	84	22	6.99	9.74	**4.28**	15	8	8	10
1918	57.0	84	22	1.25	2.36	0.74	16	9	6	8
1919	59.0	92	25	3.43	4.97	2.01	9	8	14	13
1920	59.0	87	28	1.80	4.53	0.55	20	5	6	5
1921	54.1	82	16	0.97	2.18	0.33	18	7	6	5
1922	56.6	92	18	1.48	2.70	0.55	19	6	6	7
1923	53.9	81	21	4.25	6.37	2.35	16	8	7	8
1924	54.4	84	16	*0.31*	2.76	*T.*	23	6	2	1
1925	*49.1*	84	12	4.59	5.78	3.38	9	9	13	11
1926	53.1	90	17	4.08	6.03	1.79	13	8	10	11
1927	56.8	94	23	7.82	14.07	2.81	18	5	8	10
1928	56.1	90	16	1.19	2.58	0.24	17	9	5	6

W. B. O. Philadelphia-11-26-28-810.

Climatological Data for October, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	56.2	+2.4	88	12	22	27	41	0.78	−2.89	0.35	0	4	18	6	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	54.0^{b}	+2.4	88^{b}	12	20	27†	42	0.89	−3.58	0.41	0	5	1	5	25	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	24	30	....	0.28	−3.90	0.12	T.	7	16	10	5	e.	Brice E. Riker.
Dover	Morris	600	44	53.5	+2.2	86	12	22	27	33	0.51	−3.56	0.28	T.	6	12	12	7	......	William C. Harris
Layton	Sussex	480	27	53.1	+1.6	88	12	17	27	45	0.45	−3.17	0.25	T.	4	13	5	13	sw.	A. M. Depue.
Newton	Sussex	769	44	54.6	+1.9	87	12	23	27†	38	1.07	−2.56	0.48	T.	8	11	5	15	sw.	Irving J. Kern.
Phillipsburg	Warren	363	45	55.4	+1.5	87	12	26	27	39	0.74	−2.82	0.47	0	5	16	12	3	......	Town Engineer.
Sussex	Sussex	442	33	54.2^{c}	+1.0	88^{c}	12	19^{c}	30	42	0.80	−2.64	0.22	T.	7	21^{c}	4^{c}	3^{c}	w.	A. J. W. Mowatt
Means and extremes	......	......	....	54.4	+1.9	88	12	17	27	45	0.69	−3.14	0.48	T.	6	12	8	11	sw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	......	......	......	......	......	......	....	......	......	......	......	......	......	......	......	......	William Mann.
Boonton	Morris	400	§38	53.0	+0.2	87	12	21	27	40	0.76	−3.15	0.37	0	5	20	0	11	nw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	....	1.36	−2.85	0.73	0	7	24	7	0	.....	Paul Molitor, Sr.
Elizabeth	Union	45	49	58.8^{f}	+3.4	86^{f}	17	28^{d}	29	37^{f}	1.50	−2.39	0.97	0	6	20^{c}	5^{c}	3^{c}	......	Union County Park Com.
Flemington	Hunterdon	140	§42	56.7	+0.7	88	12	24	30	39	1.45	−2.21	0.92	0	5	22	7	2	sw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	54.3	+0.9	85	12	22	30	36	1.11	−3.31	0.77	T.	8	16	8	7	sw.	Charles J. Bates.
Jersey City	Hudson	10	30	58.0	+1.7	85	12	31	30	28	1.34	−2.34	0.76	T.	7	14	14	3	sw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	55.2	+0.6	81	12†	27	26†	32	1.70	−1.78	0.97	0	6	22	3	6	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	55.8	+0.9	90	12	23	30	40	0.91	−3.60	0.61	0	6	18	9	4	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	57.4	+2.6	85	12	26	27	35	2.02	−1.56	1.06	0	5	14	16	1	sw.	N. J. Experiment Station.
New Milford‡‡††	Bergen	9	10	......	......	......	......	......	......	....	0.89	......	0.66	......	6	....	....	...	......	Hackensack Water Co
Paterson	Passaic	80	57	57.7	+2.5	87	12	28	30	32	0.83	−3.26	0.55	T.	6	21	9	1	nw.	Marion T. Probert.
Plainfield	Union	120	40	§55.4	+1.2	86	12	23	27	36	1.61	−2.54	1.07	T.	6	16	12	3	sw.	E. D. Pearson.
Ridgefield	Bergen	80	11	56.0	......	88	12	27	27†	34	1.24	......	0.99	T.	4	15	11	5	nw.	George P. Kirsten.
Somerville	Somerset	70	45	54.6^{c}	+0.3	84^{c}	17†	21^{c}	30	41^{c}	1.69	−1.75	1.38	0	4	17^{c}	11^{c}	0^{c}	w.	Arthur Gerlich.
South Orange	Essex	200	58	56.2	+2.8	89	12	25	30	38	1.29	−2.55	0.92	0	7	18	12	1	sw.	Everett W. Bird.
Verona	Essex	490	2	54.4	......	81	17	25	26†	29	0.84	......	0.59	T.	6	14	14	3	sw.	Luther Davis.
Woodcliff Lake‡‡††	Bergen	100	10	......	......	......	......	......	......	....	0.69	......	0 34	......	5	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	58	57.8	+1.5	83	12	31	30	25	1.27	−2.26	0.74	T.	5	13	15	3	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	56.0	+1.5	90	12	21	27†	41	1.31	−2.56	1.38	T.	6	18	9	4	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	55.4	−0.9	85	17	16	30	44	1.25	−2.17	0.58	0	6	17^{e}	5^{e}	4^{e}	nw.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	......	......	......	......	......	Paul T. Kornman.
Burlington	Burlington	12	§42	57.9	−0.3	86	13†	26	30	37	1.12	−2.53	0.62	0	5	21	7	3	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	......	......	......	......	......	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	......	......	......	......	......	......	......	......	
Hightstown	Mercer	120	34	56.8	+1.6	88	17	22	27	41	2.58	−1.13	1.46	0	6	19	11	1	sw.	Charles Welsh.
Imlaystown	Monmouth	115	37	......	......	......	......	......	......	....	......	......	......	......	......	......	......	......	......	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	55.8^{g}	+0.3	89	12	20^{g}	30	37^{g}	1.06	−2.38	0.63	0	5	16	12	3	sw.	James M. Armstrong.
Lakewood	Ocean	54	24	55.2	+0.1	85	17	23	27†	37	0.73	−2.86	0.50	0	6	16	10	5	sw.	R. W. Holman.
Moorestown	Burlington	75	65	58.4	+3.7	87	12	26	27	38	1.61	−1.96	0.97	0	4	19	7	5	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	56.8	......	86	13	25	27	35	1.84	......	1.11	0	4	21	8	2	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	....	1.14	−1.64	0.47	0	6	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	56.0	......	86	12	20	30	40	1.45	−1.99	0.73	0	4	24	5	2	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	54.4	......	89	17	18	30	45	1.84	......	0.80	0	4	20	11	0	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	57.4	+1.8	84	12	30	27	31	1.58	−1.83	1.27	0	6	14	8	9	sw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	57.6	+1.5	89	12	22	30	40	1.60	−1.93	0.88	0	6	27	2	2	s.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	...	....	....	....	......	William Pfeffer.
Philadelphia, Pa	......	117	57	59.9	+2.1	86	13	36	27	26	0.73	−2.08	0.61	0	4	13	11	7	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	56.5	+1.0	89	12†	16	30	45	1.48	−2.04	1.46	0	5	20	8	3	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	59.4^{b}	+3.6	84^{b}	17	29	30	30^{b}	0.24	−3.47	0.12	0	3	27	4	0	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	59.0	+2.1	83	13	32	30	22	1.38	−1.82	0.71	0	7	16	14	1	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	58.6	−1.0	80	13	30	27	25	1.11	−2.19	0.73	0	5	17	13	1	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	54.6	−1.7	85	17	27	27	40	0.60	−3.45	0.38	0	7	15	14	2	nw.	William D. Martin.
Sandy Hook	Monmouth	22	30	58.2	+1.2.	82	12	36	30	23	1.22	−2.56	0.85	0	5	13	14	4	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	58.0	+0.8	85	17	27	27	40	0.91	−2.70	0.85	0	5	17	12	2	s.	
For the State	......	......	....	56.1	+1.3	90	12	16	30	45	1.19	−2.56	1.46	T.	6	17	9	5	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood: Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for October, 1928

Stations	Drainage Basin	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware																T.			.30	.35			.03					.10				0.78
Charlotteburg	Passaic						.15													.25				.25	.16	T.		.08					0.89
Culvers Lake	Delaware						.12										T.		.02	.01	.05				.05	.01	T.		.02	T.			0.28
Dover	Passaic					.14								.01					.28					.06		.01	T.	.01					0.51
Layton	Delaware																																
Newton	Delaware						.10			T.				T.					.17	.04	.48			.14	.04	.06			.04	T.			1.07
Phillipsburg	...do					.16													.05	.47				.03	T.	T.		.03	T.				0.74
Sussex	Hudson					.19														.18	.22			.10	.04	.04		T.	.03				0.80
The Red Sandstone Plain.																																	
Bayonne	Coast																																
Boonton‖	Passaic	.03					.14													.37	.04				.18				T.				0.76
Chatham‖	...do	.09					.15											T.		.73	.10			.12			.04		.13				1.36
Elizabeth	Coast				.23									T.						.97	.23			.04	.01				.02				1.50
Flemington	Raritan						.26			T.										.92				.19	.04	T.			.04				1.45
Highwood	Hackensack						.15			T.				T.					.04	.67	.10			.06	.04	.01	T.		.04				1.11
Jersey City	Coast						.17							T.			T		.05	.76	.25			.08	.02	T.	T.	T.	.01				1.34
Lambertville	Delaware						.54			.01										.97			.08	.06	T.	T.		.04					1.70
Little Falls‖	Passaic	.05					.14													.61	.04				.06				.01				0.91
New Brunswick	Raritan	T.	T.		T.	T.	.54			T.										1.06	.33	T.		.05		T.			.04				2.02
New Milford.**	Hackensack					.13	.02												.66					.03	.03	.02							0.89
Paterson	Passaic					.15				T.				T.						.55	.05			.03	.02	.03	T.		T.				0.83
Plainfield	Raritan						.30							T.			T.		1.07	.12				.08	.01	T.	T.		.03				1.61
Ridgefield**	Hackensack					.16				T.				T.			T.		.78	.21				.09		T.	T.						1.24
Somerville	Raritan						.23														1.38			.03	.05								1.69
South Orange	Rahway																																
Verona**	Passaic					.13								T.				T.	.59	.04				.06			T.	.01	.01				0.84
Woodcliff Lake**	Hackensack					.18													.34	.03				.11			.03						0.69
New York, N. Y***	Coast					.16								T.			T.		.73	.28				.09		T.	T.	T.	.01				1.27
The Southern Interior.																																	
Belleplain	Tuckahoe						.12				.02										.58			.37	.11				.05				1.25
Bridgeton	Coast																																
Burlington	Delaware						.10													.62	.32			T.	.03				.05				1.12
Clayton	Delaware																																
Hammonton	Mullica																																
Hightstown	Raritan						.14							T.						.82	1.46			.06	.04				.06				2.58
Imlaystown	Delaware																																
Indian Mills	Mullica						.14													.63	.05			.19					.05				1.06
Lakewood	Metedeconk						.02											T.		.50	.02			.10	.04				.05				0.73
Moorestown	Delaware																			.57	.97			T.	.05				.02				1.61
Moorestown No. 2	Delaware						.07													.61	1.11				.05								1.84
Northfield	Coast						.06													.46	.02			.47	.10				.03				1.14
Pleasantville‖	Coast	.09					.07								T.					.50					.73				.06				1.45
Runyon	...do						.57													.80	.41			.06									1.84
Trenton***	Delaware					.06								T.			T.		.98	.46				.04		T.	T.	.03	.01				1.58
Tuckerton	Coast						.09													.88	.05			.49	.05				.04				1.60
Vineland	Maurice																																
Phila., Pa***	Delaware					.06											T.		.61	T.				.05	T.	T.		.01	T.				0.73
The Sea Coast.																																	
Asbury Park	Coast													.01					.12					.11									0.24
Atlantic City***	...do					.01	.03												.31	.31				.70	.01			.01	T.				1.38
Cape May City	...do						.09				.05								T.	.24	T.			.58	.15		T.	T.	T.				1.11
Long Branch	...do					.03	.07							.01			T.		.28	.10				.10	T.			.01	T.				0.60
Sandy Hook***	...do					.24								T.			T.		.73	.14				.10		T.			.01				1.22

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.15	30.53	30	29.65	24	13.3	35	s.	28	77	58	74	77
Long Branch	30.12	30.56	30							76	58	70	
Moorestown No. 2										86	53	82	
New York, N. Y	30.14	30.57	30	29.63	24	14.3	42	nw.	25	71	55	66	80
Philadelphia, Pa	30.16	30.59	30	29.70	24	8.7	29	n.	29	80	61	72	76
Ridgefield	30.14	30.58	30	29.61	24								
Sandy Hook	30.13	30.55	30	29.62	24	13.0	37	sw.	9	74	58	72	72
Trenton	30.14	30.53	30	29.66	24	7.9	26	sw.	18	82	64	76	72
Verona	30.14	30.59	30	29.67	24	6.1	23	nw.	24	73	46	73	71

Daily Temperatures for October, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	59	63	79	80	76	76	75	70	79	73	79	88	82	73	63	70	84	79	81	75	73	66	72	62	56	51	50	60	50	49	57	69.4
	Minimum	35	38	46	49	51	53	42	34	49	42	38	50	58	42	34	56	57	65	60	47	37	37	52	45	37	31	22	39	31	25	27	42.9
Charlotteburg	Maximum	66	63	77	78	73	69	69	66	76	73	77	88	83	....	....	75	83	79	78	72	65	65	73	62	54	55	51	59	59	45	53	68 5^{b}
	Minimum	27	31	43	42	47	52	35	30	42	40	35	46	65	44	27	48	58	66	53	49	42	29	47	43	33	33	20	29	32	20	20	39.6
Dover	Maximum	61	61	73	76	77	69	70	63	74	66	76	86	76	64	62	68	80	78	76	63	63	61	72	63	54	48	48	60	53	45	53	65.8
	Minimum	32	35	45	45	50	45	41	35	49	42	39	53	51	39	31	56	58	62	57	47	43	33	56	35	35	30	22	37	25	25	25	41.2
Layton	Maximum	65	65	75	79	71	72	69	65	81	68	80	88	73	65	61	71	82	76	77	63	66	64	70	58	54	43	47	58	46	47	51	66.1
	Minimum	33	35	50	49	50	48	39	30	46	39	35	45	59	39	29	55	58	66	56	45	37	30	49	42	30	27	17	36	29	19	20	40.1
Newton	Maximum	63	63	75	76	72	70	72	65	77	72	78	87	81	63	63	68	82	75	78	68	65	62	68	61	56	50	47	53	49	45	53	66.4
	Minimum	34	38	48	47	53	51	47	36	48	48	40	53	47	45	34	53	60	65	57	47	38	41	50	42	34	30	23	36	32	23	27	42.8
Phillipsburg	Maximum	69	64	75	77	75	73	72	67	78	70	79	87	81	66	62	71	83	81	78	61	65	65	73	60	56	50	48	59	46	45	53	67.4
	Minimum	36	39	45	48	52	46	43	37	51	44	40	49	55	42	31	58	58	65	58	48	40	40	56	43	40	35	26	40	27	27	30	43.5
Sussex	Maximum	62	63	76	80	73	74	68	67	78	71	79	88	76	65	....	....	83	79	79	65	68	64	71	60	53	....	47	57	48	48	54	67.7^{c}
	Minimum	29	34	50	48	48	53	39	31	46	39	37	47	53	43	....	....	65	61	60	41	37	31	47	42	32	....	20	37	30	19	21	40.7^{c}
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	65	63	74	75	73	74	70	64	74	68	76	87	78	64	62	69	80	80	79	64	66	64	74	56	56	49	49	60	44	48	53	66.4
	Minimum	30	34	43	42	47	53	39	32	40	42	36	48	56	43	30	35	56	64	53	52	42	32	39	46	32	31	21	27	34	23	23	39.5
Elizabeth	Maximum	65	66	76	79	71	74	63	65	75	71	79	80	78	73	67	72	86	84	82	67	66	....	77	....	....	....	....	....	45	48	51	70.4^{f}
	Minimum	37	41	46	49	52	56	44	38	46	45	42	53	61	46	36	58	59	64	63	54	41	40	51	46	....	...	....	....	28	38	41	47.2^{d}
Flemington	Maximum	67	66	77	77	77	76	70	69	76	72	79	88	82	77	62	74	84	81	81	72	70	68	74	62	58	53	48	64	55	52	56	69.9
	Minimum	35	38	43	45	51	55	44	37	44	43	40	51	59	45	34	58	59	64	59	50	42	36	49	46	39	34	25	39	33	24	28	43.5
Highwood	Maximum	60	60	71	73	72	67	68	61	74	67	76	85	77	58	64	74	82	81	75	67	62	65	74	64	56	57	47	61	45	43	51	65.7
	Minimum	34	38	46	48	50	52	44	35	46	44	40	53	55	42	33	48	60	66	63	51	39	39	52	45	34	30	23	41	31	22	27	42.9
Jersey City	Maximum	62	63	74	76	74	71	70	62	75	69	75	85	78	61	64	71	81	82	80	65	64	65	74	60	57	50	48	59	50	44	55	66.6
	Minimum	44	51	53	54	59	57	52	47	57	53	52	57	52	45	46	59	65	65	63	50	45	49	55	47	42	36	33	43	35	31	38	49.5
Lambertville	Maximum	62	63	73	74	74	68	69	68	73	68	73	81	81	76	61	74	80	78	74	68	60	73	63	54	48	47	58	44	41	51	50	65.4
	Minimum	39	39	48	52	51	50	49	38	49	47	45	54	59	44	38	57	64	65	62	50	42	49	45	39	35	27	38	33	27	28	30	44.9
Little Falls§§	Maximum	67	65	77	80	74	74	72	66	76	71	79	90	79	66	64	72	84	83	82	66	68	68	74	58	57	49	57	63	46	48	55	68.7
	Minimum	33	37	45	46	50	57	42	35	44	41	39	54	65	44	33	48	57	67	57	51	42	36	47	47	36	35	24	37	35	23	26	43.0
New Brunswick	Maximum	62	64	74	76	76	73	72	66	76	74	77	85	81	78	65	76	84	84	79	67	66	68	76	66	58	51	49	60	56	47	55	69.1
	Minimum	38	40	45	48	52	58	46	38	49	47	42	54	59	46	36	58	63	67	61	52	42	40	53	48	40	35	26	39	33	27	31	45.6
Paterson	Maximum	63	63	74	77	74	71	70	65	75	69	78	87	78	68	65	73	82	83	77	67	65	66	75	65	57	49	50	62	58	45	54	67.9
	Minimum	39	43	49	52	55	56	48	54	48	47	46	55	66	45	38	59	62	66	60	53	43	42	54	48	39	37	31	41	37	28	30	47.5
Plainfield	Maximum	62	63	74	76	74	71	70	62	76	70	77	86	80	61	65	72	84	83	80	65	65	68	77	62	57	51	49	60	50	45	55	67.4
	Minimum	36	39	43	47	52	53	42	35	50	48	49	50	58	44	33	57	59	63	61	50	41	36	46	42	35	33	23	37	35	24	27	43.5
Ridgefield	Maximum	64	64	75	78	78	73	71	62	75	69	77	88	77	63	64	73	83	83	80	66	64	65	75	58	56	49	47	63	46	46	52	67.2
	Minimum	36	41	48	48	53	55	48	38	48	46	43	54	49	42	35	58	65	65	63	46	43	41	55	41	39	31	27	41	30	27	30	44.7
Somerville	Maximum	67	66	77	78	75	73	72	65	75	69	79	....	....	....	64	73	84	84	80	72	70	67	77	61	57	57	49	62	40	49	56	68.1^{c}
	Minimum	35	37	43	45	50	52	41	35	43	42	38	....	....	...	32	58	59	58	56	48	41	35	55	45	37	32	22	40	29	21	26	41.2^{c}
South Orange	Maximum	64	63	76	77	75	73	72	63	75	69	78	89	77	75	71	72	84	83	80	70	66	66	77	63	58	52	52	64	53	47	55	69.0
	Minimum	34	39	44	48	52	52	47	35	44	42	40	52	59	56	34	56	58	63	60	49	40	37	52	46	35	30	27	39	32	25	26	43.5
Verona	Maximum	60	59	71	74	71	68	67	60	72	64	74	76	76	59	62	70	81	80	76	62	61	62	72	58	53	42	47	60	47	42	51	63.8
	Minimum	36	42	49	53	54	51	48	38	52	47	45	63	50	41	36	57	63	66	61	46	43	44	55	40	39	25	27	40	32	25	29	45.1
New York, N. Y.	Maximum	62	62	73	76	74	71	69	61	73	67	74	83	77	61	64	70	80	80	79	65	63	63	71	59	56	49	48	59	49	44	55	65.7
	Minimum	45	51	53	55	60	58	52	48	58	53	52	58	52	45	46	59	66	65	64	50	46	51	56	47	42	36	34	44	35	31	39	50.0
The Southern Interior.																																	
Belleplain	Maximum	64	66	74	76	78	79	78	70	78	74	76	83	84	72	69	83	85	79	76	70	70	71	77	65	61	57	64	67	53	55	63	71.5
	Minimum	36	33	38	41	41	43	37	36	34	39	34	45	57	51	28	58	64	64	60	48	31	30	38	45	38	31	20	34	27	16	22	39.3
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	62	67	74	75	77	73	73	69	78	76	77	85	86	83	65	81	86	83	80	75	63	69	77	68	57	55	50	59	57	47	57	70.5
	Minimum	39	41	44	47	51	59	43	40	48	46	40	49	55	43	36	59	65	68	58	53	41	39	54	50	40	37	28	39	37	26	30	45.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	66	67	76	78	77	75	72	68	78	74	80	86	87	78	68	80	88	85	82	74	66	70	76	65	57	51	50	59	55	49	58	70.8
	Minimum	33	36	42	45	49	56	43	34	52	40	39	52	59	45	33	57	65	65	55	50	38	37	47	44	38	33	22	40	29	23	27	42.8
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	65	66	78	81	79	74	72	71	80	72	80	89	87	79	68	82	87	83	80	73	64	70	77	64	57	53	53	60	56	47	60	71.2
	Minimum	39	36	51	45	48	60	40	35	49	44	38	....	....	....	....	....	....	....	60	51	35	35	52	50	38	30	22	39	32	20	28	40.3^{g}
Lakewood	Maximum	58	62	71	73	75	69	70	61	79	72	76	83	83	78	67	81	85	82	73	69	61	65	74	63	56	50	50	60	49	44	53	67.5
	Minimum	37	36	40	46	49	57	43	36	42	43	38	53	58	46	31	58	63	65	56	54	37	34	46	47	35	33	23	40	30	23	27	42.8
Moorestown	Maximum	69	70	77	79	79	76	75	74	78	78	79	87	86	74	63	80	85	84	84	72	68	72	72	63	60	53	53	61	50	58	61	71.6
	Minimum	39	38	43	49	49	57	47	41	49	48	41	62	49	45	35	56	64	65	59	52	39	39	51	49	41	35	26	38	35	28	28	45.1
Moorestown No. 2	Maximum	64	66	73	75	77	72	73	69	78	67	77	85	86	64	64	81	85	83	78	64	66	70	76	59	59	52	49	60	48	47	58	68.5
	Minimum	40	40	45	49	50	50	48	40	50	47	42	53	59	42	39	59	66	65	59	46	40	39	55	44	42	32	25	43	29	34	30	45.2
Pleasantville§§	Maximum	62	65	73	75	73	73	73	69	79	68	76	86	85	62	67	79	80	80	75	75	65	68	74	59	61	53	56	65	49	49	54	68.6
	Minimum	38	38	41	46	48	61	44	40	53	44	39	46	58	51	32	53	63	63	58	52	36	34	50	49	38	33	24	35	31	20	28	43.4
Runyon	Maximum	65	65	76	78	80	76	76	75	77	78	70	88	85	70	69	77	89	86	80	70	68	70	76	60	59	50	58	65	59	49	51	70.8
	Minimum	34	32	33	44	44	40	35	30	40	35	34	51	52	44	29	38	52	64	56	54	35	32	43	46	32	31	19	32	31	18	22	38.1
Trenton	Maximum	64	66	74	74	75	70	71	67	76	67	75	84	84	61	64	77	83	81	78	64	62	67	75	59	56	50	51	56	48	47	57	67.2
	Minimum	42	43	47	51	56	55	48	44	54	50	48	53	57	48	42	59	65	67	61	47	42	45	58	44	40	35	30	43	35	31	35	47.6
Tuckerton	Maximum	63	67	75	78	75	77	75	67	78	72	78	89	88	80	69	79	80	78	76	70	67	68	79	62	60	57	54	65	60	49	56	70.7
	Minimum	38	39	45	47	49	60	46	40	55	41	41	49	57	50	35	60	64	60	61	51	37	38	55	48	37	31	24	42	30	22	30	44.6
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia	Maximum	64	65	72	73	77	73	73	69	76	68	75	83	86	65	63	78	83	81	79	69	65	67	75	61	58	52	47	59	48	48	56	68.0
	Minimum	46	48	52	55	60	60	55	50	56	58	53	57	60	52	49	61	68	65	64	52	47	50	60	48	44	40	36	46	39	36	40	51.8
The Sea Coast.																																	
Asbury Park	Maximum	60	66	71	74	69	71	75	65	80	80	80	80	82	....	....	80	84	82	82	77	68	65	71	64	57	52	54	60	50	47	56	69.0
	Minimum	45	48	52	55	59	59	51	54	60	56	50	58	61	50	44	60	64	64	63	52	43	46	59	44	40	36	30	45	32	29	36	49.8
Atlantic City	Maximum	60	65	69	70	70	74	75	64	72	69	69	81	83	61	65	73	71	72	73	66	64	65	70	61	60	53	52	64	49	46	54	65.8
	Minimum	45	51	54	55	60	60	56	48	64	55	55	60	61	53	48	65	66	66	65	49	45	51	61	48	45	37	33	48	38	32	44	52.2
Cape May City	Maximum	63	67	70	71	71	69	71	66	76	67	71	76	80	66	66	75	73	74	74	67	62	67	70	60	61	53	55	62	49	49	58	66.4
	Minimum	43	46	51	52	54	55	54	46	63	50	49	60	62	46	44	63	65	66	65	52	47	54	60	51	48	35	30	49	37	36	39	50.7
Long Branch	Maximum	53	61	72	73	65	61	72	58	71	65	80	84	83	53	65	74	85	72	73	58	52	62	61	58	57	51	47	53	39	37	53	62.8
	Minimum	40	42	46	52	55	53	54	41	56	47	40	57	57	43	35	64	65	68	60	47	40	40	57	46	39	35	27	42	32	28	30	46.4
Sandy Hook	Maximum	59	60	71	72	68	70	70	61	74	67	74	82	76	59	65	71	80	78	72	66	62	63	70	60	56	50	46	57	48	44	53	64.6
	Minimum	49	52	53	55	58	58	54	52	61	54	52	59	56	50	50	60	65	65	63	52	49	53	57	48	45	40	38	45	37	36	41	51.8

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville••	Evaporation	.096	.112	.096	.096	.070	.160	.160	.128	.144	.160	.128	.128	.224	.144	.064	.096	.128	.148	.096	.144	.160	.064	.106	.160	.128	*	.156	.064	.096	.096	.064	3.61
	Wind movement	37	32	26	29	57	37	55	63	60	42	54	73	96	39	53	69	88	73	58	90	17	52	58	27	127	62	76	48	57	34	36	1,72
Runyon	Evaporation	.120	.140	.090	.090	.090	.030	.080	.090	.100	.110	.110	.140	.110	.120	.120	.120	.090	.140	.080	.010	.110	.120	.120	.080	.100	.080	.080	.080	.080	.090	.090	3.01
	Wind movement	12	12	17	14	8	21	19	21	46	32	30	21	53	50	11	21	40	80	34	30	24	21	18	34	38	32	26	30	21	20	10	85

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. ••Observations taken in the morning, and entered on preceding day.

51.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. NOVEMBER, 1928. No. 11

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

This was a comparatively warm and dry month, of the same character, for the most part, as the month immediately preceding. Though considerably cooler than November of last year, it was warmer than any other November since that of 1913. The extremes of temperature were not notable. Temperatures normal or below prevailed on the 1st. Following this well-defined periods above and below normal, of several days each, alternated consistently through the month, the greatest departures being above normal from the 15th to the 19th. The coolest day was the 26th, when maximum temperatures were only a degree or two above freezing.

Less precipitation has been recorded in November in only two years since 1908, and in only six years since 1885. This relative dryness permitted autumn farm work to go on well. Total snowfall averaged about a third of an inch over the State. A northwest gale prevailed along the coast on the 8th, but the month brought in no reports of damage by wind. Sandy Hook, which was without killing frost during October, reported its first killing frost on the 26th.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 36 stations, was 45.1°, which was 2.4° above normal. The highest temperature was 78° at Indian Mills on the 18th, and the lowest, 13°, at Layton and Pleasantville on the 26th. The greatest daily range of temperature was 42° at Layton on the 1st. The highest monthly mean temperature was 48.8° at Cape May City, and the lowest, 41.5° at Layton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +0.7°; Red Sandstone Plain, +0.1°; Southern Interior, +0.2°; Sea Coast, +0.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 39 stations, was 1.90 inches, which was 1.24 inches below normal. The average snowfall at 35 stations was 0.3 inch. The heaviest monthly snowfall reported was 3.0 inches at Layton. The greatest monthly precipitation was 2.76 inches, at Indian Mills, and the least, 1.20 inches at Boonton and Little Falls. The greatest amount of precipitation in any 24 consecutive hours was 1.17 inches at Plainfield on the 30th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 9, or 1 more than normal.

The precipitation accumulated departure from the normal for the year 1928, to date, by sections, is: The Highlands, +3.95 inches; Red Sandstone Plain, +2.30 inches; Southern Interior, +1.83 inches; Sea Coast, —0.24 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 11 miles per hour, which was 3 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 44 miles per hour from the northwest at Atlantic City on the 8th. High winds occurred over the State on the 6th, 8th, 9th and 19th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 10, which was 2 less than normal; partly cloudy, 9, or 1 more than normal; cloudy, 11, or 1 more than normal. The per cent of possible sunshine was 41, which was 17 per cent below normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 30.03 inches, which was 0.07 inch below normal. The highest reading was 30.54 inches on the 14th at Atlantic City, and the lowest 29.46 inches on the 8th at Trenton.

The mean stage of the Delaware River at Phillipsburg was 1.0 foot. The highest stage was 1.0 foot, which occurred on twenty one days, the remaining nine days showed a stage of 0.9 foot. At Trenton the mean stage was 0.5 foot, which was 1.3 feet below normal. The highest stage was 0.8 foot on the 23d.

Light hail occurred at Burlington on the 8th. Thunderstorms were recorded on the 8th at Burlington and Jersey City. Dense fog was reported by most of the observers on one or more of the following dates: 1, 2, 3, 4, 19.

ERRATA.

August 1928. Pleasantville, wind movement on the 30th, 144 miles, should be 44 miles; wind movement on the 31st should be 40 miles. Total monthly movement, a1,480 should be 1,420 miles. Cape May City, minimum temperature on the 7th, 74° should be 73°. Mean minimum temperature, 68.5° should be 68.4°. Little Falls, greatest precipitation in 24 hours, 1.16 inches, should be 1.95 inches.

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	44.8	76	18	4.53	7.90	2.72	......	......	......	......	......
1886	44.5	73	17	4.49	6.24	3.45	......	......	......	......	......
1887	41.5	72	13	1.94	2.60	0.95	......	......	......	......	6
1888	45.8	77	8	3.97	5.41	2.66	......	......	......	13	10
1889	45.7	69	13	**8.48**	**11.45**	4.70	......	......	......	13	13
1890	43.8	74	11	0.82	*1.10*	0.38	......	13	12	5	8
1891	42.2	70	6	2.39	3.47	1.54	......	12	10	8	4
1892	41.9	71	12	7.29	9.49	**4.74**	......	8	9	13	11
1893	41.8	70	11	3.48	4.53	2.19	......	10	11	9	7
1894	40.3	76	11	3.34	5.12	1.77	....	13	7	10	10
1895	45.7	**80**	12	3.17	5.10	1.56	0	12	7	11	10
1896	48.2	78	12	3.05	5.68	1.37	3.2	9	9	12	8
1897	43.8	74	10	4.59	5.95	2.42	1.3	8	11	11	12
1898	42.4	70	11	6.76	9.07	3.83	**14.7**	10	9	11	14
1899	44.0	71	17	2.29	4.32	0.72	1.1	15	8	7	7
1900	47.5	79	15	3.43	5.54	1.82	T.	9	10	11	9
1901	*38.5*	69	10	2.38	4.23	1.18	0.8	12	9	9	6
1902	**49.3**	**80**	20	2.20	4.17	0.87	0.2	10	11	9	8
1903	39.9	79	3	1.26	2.03	0.75	T.	16	8	6	6
1904	40.2	69	6	2.18	3.40	1.30	1.6	12	10	8	6
1905	42.1	70	6	1.84	2.86	0.54	0.1	12	10	8	6
1906	43.6	70	8	1.61	2.52	1.06	2.3	16	7	7	6
1907	43.5	*68*	13	5.65	6.95	4.19	0.8	10	8	12	13
1908	43.1	72	2	0.96	1.29	0.35	2.2	14	8	8	4
1909	46.4	**80**	12	2.36	4.33	1.32	2.1	13	8	9	8
1910	40.4	71	13	3.79	5.73	1.63	1.4	5	13	12	9
1911	41.3	73	13	5.17	6.50	3.17	1.7	8	11	11	10
1912	45.3	76	11	3.43	8.12	2.02	1.3	15	8	7	6
1913	46.2	77	**21**	2.71	4.89	1.00	T.	14	7	9	7
1914	43.3	**80**	6	2.60	4.81	1.21	0.7	16	8	6	6
1915	44.0	75	17	1.69	3.11	0.96	0	14	8	8	8
1916	43.3	75	12	2.11	3.81	0.80	T.	16	5	9	8
1917	39.8	*68*	9	*0.56*	1.15	*0.18*	0.7	19	5	6	3
1918	43.9	71	12	1.87	3.05	0.49	0	14	6	10	7
1919	43.7	76	13	3.74	6.18	1.98	T.	13	7	10	11
1920	43.0	74	12	4.41	7.90	2.14	0.2	9	6	15	10
1921	44.3	79	18	4.26	6.69	2.79	0.1	9	6	15	14
1922	44.3	73	13	0.91	1.56	0.49	0.2	13	8	9	6
1923	43.1	72	11	2.51	4.09	1.10	0	11	8	11	7
1924	42.9	77	*1*	2.03	3.23	1.17	1.3	14	8	8	5
1925	42.0	76	10	3.40	5.10	2.48	0.7	14	8	8	9
1926	42.5	76	8	4.04	7.19	2.44	T.	13	8	9	9
1927	47.9	**78**	15	4.02	8.68	1.74	0.1	10	8	12	11
1928	45.1	78	13	1.90	2.76	1.20	0.3	10	9	11	9

W. B. O. Philadelphia-11-19-28-810.

Climatological Data for November, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	43.8	+2.7	75	18	17	26	36	2.47	−0.77	0.75	T.	10	13	4	13	.....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	42.6	+2.5	70	16†	17	26	41	2.37	−1.15	0.83	1.7	11	3	15	12	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	.....	.....	.....	.....	15	26	....	2.24	−0.56	0.68	2.0	9	12	6	12	e.	Brice E. Riker.
Dover	Morris	600	44	43.3	+3.2	74	18	17	26	37	2.72	−0.92	1.13	1.0	9	4	14	12	.....	William C. Harris
Layton	Sussex	480	27	41.5	+2.7	77	18	13	26	42	2.23	−0.26	0.73	3.0	10	14	2	14	sw.	A. M. Depue.
Newton	Sussex	769	44	43.1	+2.6	75	18	15	26	30	1.97	−1.16	0.58	T.	7	6	4	20	nw.	Irving J. Kern.
Phillipsburg	Warren	363	45	43.9	+2.7	75	18	21	26	39	2.01	−1.19	0.76	T.	7	15	8	7	.....	Town Engineer.
Sussex	Sussex	442	33	42.4^{a}	+1.3	75^{a}	18	15^{a}	26	40^{a}	2.51	−0.74	0.74	T.	10	17	3	10	.....	A. J. W. Mowatt
Means and extremes	.....	.....	....	42.9	+2.5	77	18	13	26	42	2.32	−0.84	1.13	1.0	9	11	7	12	w.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	William Mann.
Boonton	Morris	400	§38	42.6	+1.2	74	18	19	26†	39	1.20	−2.37	0.39	.....	8	13	1	16	sw.	John Kline.
Chatham	Morris	185	24	.....	.....	.....	.....	.....	.....	....	1.53	−1.37	0.34	1.0	9	16	9	5	.....	Paul Molitor, Sr.
Elizabeth	Union	45	49	46.2	+2.7	75	18	22	26	31	1.94	−1.31	0.55	0.2	10	20	2	8	w.	Union County Park Com.
Flemington	Hunterdon	140	§42	45.1	+2.2	76	18	18	26	38	1.52	−1.60	0.47	T.	8	13	6	11	w.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	43.3	+1.3	73	18	20	26	31	1.82	−1.68	0.72	T.	10	8	6	16	sw.	Charles J. Bates.
Jersey City	Hudson	10	30	46.6	+2.6	71	18	21	26	20	2.05	−1.14	0.80	T.	10	5	16	9	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	44.1	+0.9	72	18	18	26	24	1.99	−1.22	0.52	T.	10	17	5	8	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	44.0	+1.8	77	18	20	26	39	1.20	−1.70	0.41	0	11	9	9	12	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	46.1	+2.7	73	16†	19	26	33	1.56	−1.92	0.45	T.	7	9	12	9	sw.	N. J. Experiment Station.
New Milford‡‡††	Bergen	9	10	.....	.....	.....	.....	.....	.....	....	2.01	.....	1.03	.....	7	.....	.....	.....	.....	Hackensack Water Co
Paterson	Passaic	80	57	46.4	+2.9	76	18	24	26	30	1.96	−1.21	0.73	0	9	21	2	7	sw.	Marion T. Probert.
Plainfield	Union	120	40	44.3	+1.8	73	18	19	26	35	2.11	−1.26	1.17	0.2	9	4	15	11	sw.	E. D. Pearson.
Ridgefield	Bergen	80	11	44.4	.....	74	18	20	26	34	2.16	.....	1.07	T.	9	6	12	12	nw.	George P. Kirsten.
Somerville	Somerset	70	45	44.6	+2.2	76	18	17	26	40	1.23	−1.81	0.44	T.	8	13	3	14	w.	Arthur Gerlich.
South Orange	Essex	200	58	45.0^{m}	+3.2	.....	.....	19	26	34^{m}	1.96	−1.34	0.64	T.	11	6	10	14	w.	Everett W. Bird.
Verona	Essex	490	2	43.6	.....	73	18	19	26	22	2.26	.....	1.08	0.3	10	3	16	11	nw.	Luther Davis.
Woodcliff Lake‡‡††	Bergen	100	10	.....	.....	.....	.....	.....	.....	....	2.47	.....	1.15	.....	6	.....	.....	.....	.....	Hackensack Water Co.
New York, N.Y.	.....	365	58	46.6	+2.4	71	18	21	26	19	2.16	−0.80	0.97	T.	10	3	14	13	nw.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	44.7	+2.1	77	18	17	26	40	1.77	−1.53	1.17	0.1	9	11	8	11	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	.....	.....	.....	.....	.....	.....	.....	§	.....	.....	.....	.....	.....	.....	.....	.....	Thomas J. Durell.
Bridgeton	Cumberland	90	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Paul T. Kornman.
Burlington	Burlington	12	§42	46.6	+2.2	74	18	22	26	34	2.30	−0.81	0.48	T.	11	11	5	14	uw.	Public Service Power Co.
Clayton	Gloucester	130	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harry P. Campbell.
Hammonton	Atlantic	103	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Charles Welsh.
Hightstown	Mercer	120	34	45.6	+2.3	76	18	17	26	40	1.55	−1.76	0.32	T.	8	13	7	10	w.	Frank M. Lawrence.
Imlaystown	Monmouth	115	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James M. Armstrong.
Indian Mills‡‡	Burlington	76	39	47.1	+4.2	78	18	21	26	40	2.76	−0.32	0.54	T.	10	8	10	12	sw.	
Lakewood	Ocean	54	24	45.3	+2.5	75	18	20	26†	35	1.92	−0.54	0.48	T.	10	6	10	14	sw.	R. W. Holman.
Moorestown	Burlington	75	65	47.0	+3.8	73	16	20	26	38	1.90	−1.35	0.50	T.	9	8	10	12	nw.	John B. Warrick.
Moorestown No. 2	Burlington	.....	....	45.6	.....	74	16†	21	26	34	1.52	.....	0.51	T.	8	8	8	14	w.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	21	.....	.....	.....	.....	.....	.....	....	1.35	−1.03	0.33	0	8	....	....	....	.....	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	45.4^{a}	.....	77	16†	13	26	37	1.25	−1.47	0.71	.....	11	17	4	9	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	43.9^{c}	.....	75	15	17	26	37	1.69	.....	0.43	.....	6	13	13	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	46.6	+2.2	73	18	21	26	26	1.91	−1.52	0.75	T.	9	3	14	13	sw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	47.2	+3.1	76	16†	18	26	32	1.71	−1.37	0.35	0	9	14	4	12	s.	John H. Brown.
Vineland	Cumberland	109	59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	William Pfeffer.
Philadelphia, Pa	.....	117	57	49.0	+3.3	74	18	25	26	23	1.94	−0.76	0.77	T.	8	4	10	16	sw.	U. S. Weather Bureau.
Means and extremes	.....	.....	...	46.0	+2.9	78	18	13	26	40	1.81	−1.13	0.75	T.	9	10	9	11	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	48.2	+3.4	74	18	21	26	26	1.80	−1.12	0.45	T.	9	18	6	6	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	48.2	+2.6	68	16	22	26	28	1.87	−0.95	0.70	0	10	7	10	13	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	48.8	+1.4	72	18	26	26	26	1.39	−1.83	0.43	T.	7	5	14	11	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	44.4	+0.2	75	19	19	26	33	2.09	−1.43	0.56	T.	9	5	14	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	30	46.7	+2.1	67	18	25	26	16	1.89	−1.36	0.62	T.	10	3	13	14	sw.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	47.3	+1.9	75	19	19	26	33	1.81	−1.34	0.70	T.	9	8	11	11	nw.	
For the State	.....	.....	....	45.1	+2.4	78	18	13	26	42	1.90	−1.24	1.17	0.3	9	10	9	11	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for November, 1928

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.10	.75				.28				.10	.10			T.		.03	.60			.18				.02				.31		2.47
Charlotteburg	Passaic			.09	.83				.11	.19			.05	.14					.03	.12	.35	T.	.17								.29		2.37
Culvers Lake	Delaware			.04	.55				.30				.11	.02						.68	.23	T.	.06			T.					.25		2.24
Dover	Passaic		.01	*	.81				.20				.13						.03	.24			.17								1.13		2.72
Layton	Delaware			.06	.30				.14				.15	.02					.04	.73	.09		.10								.60		2.23
Newton	Delaware		T	.05	.58				.14				.12	T					T.	.51	T.		.11								.46		1.97
Phillipsburg	...do			.11	.49				.07				.11	T.						.38		T.	.09			T.					.76		2.01
Sussex	Hudson			.06	.61				.19				.11	.03					.02	.74	.24		.14				T.				.37		2.51
The Red Sandstone Plain.																																	
Bayonne	Coast																																
Boonton ‖	Passaic			T.	.39	.20			.07	.10				.12						T.	.16		.14								.02		1.20
Chatham ‖	...do			T.	.17	.34			.11	.26				.19			.03		T.		.22		.07								.14		1.53
Elizabeth	Coast		.06	.30	.43				.15				.01	.12			T.		.03		.17	T.	.12			T.					.55		1.94
Flemington	Raritan		T.	.09	.43				.11				.04				T.		.04	T.	.25	T.	.09								.47		1.52
Highwood	Hackensack		T.	.11	.39				.21	.01			.05	.03					T.	.11	.10		.09						T		.72		1.82
Jersey City	Coast		.06	.24	.45				.20				.04				T.		.03	.04	.10		.09				T.				.80		2.05
Lambertville	Delaware		.06	*	.53				.06				.10				T.		.02	*	.25	T.	.45				T.				.52		1.99
Little Falls. ‖	Passaic			.04	.41	.17			.09	.07				.05					.02	.01	.18		.13								.03		1.20
New Brunswick	Raritan		.04	.28	.45				.11			T.		T.	T.				T.	T.	.19	T.	.08		T.	T.					.41		1.56
New Milford.**	Hackensack			.18	.40				.17				.02							.17		.04									1.03		2.01
Paterson	Passaic		T.	.12	.61				.15				.03	.02						.04	.16		.10			T.					.73		1.96
Plainfield	Raritan			.36	.16				.08				.04	.03			T.		.03	.17			.07				T.				1.17		2.11
Ridgefield**	Hackensack		T.	*	.61				.21				*	.05			T.		.02	.13		.07				T.	T.		T.		1.07		2.16
Somerville	Raritan			.06	.30				.09				.01				T.		.02		.22	T.	.09			T.					.44		1.23
South Orange	Rahway		.03	.13	.29				.19	.05				.13					.03	.02	.30		.15								.64		1.96
Verona**	Passaic		.03	.23	.37				.18				.07				T.		.01	.18		.06	.05						T.		1.08		2.26
Woodcliff Lake**	Hackensack			.21	.53				.20				.24										.14								1.15		2.47
New York, N. Y***	Coast		.06	.29	.35				.18				.05				T.		.04	.14		.03	.05				T.				.97		2.16
The Southern Interior.																																	
Belleplain	Tuckahoe		*	*	.62				.18				.03				T.			*	.55										§		§
Bridgeton	Coast																																
Burlington	Delaware		.15	.22	.48				.28				.05	.10			T.		.01	T.	.47	.03	.11						T		.40		2.30
Clayton	Delaware																																
Hammonton	Mullica																																
Hightstown	Raritan		.10	.26	.32				.09				.05						T.		.26	T.	.16								.31		1.55
Imlaystown	Delaware																																
Indian Mills	Mullica		.48	.38	.26				.16				T.	.33			.06		T.	T.	.54	.03	.12						T.		.40		2.76
Lakewood	Metedeconk		.17	.36	.22				.05				.02				.04		.02	T.	.42	T.	.14						T.		.48		1.92
Moorestown	Delaware		.14	.23	.28				.02				.01	.10			T.		T.		.50		.12						T.		.50		1.90
Moorestown No. 2	Delaware			.23	.37	.06			T.		.02			.13			T.		T.	T.	.51	T.	.11				T.				.09		1.52
Northfield	Coast		.30	.28	.06				.02					.04						T.	.25		.07								.33		1.35
Pleasantville ‖	Coast			.37	.22				.05					.09			.02				.32	T.	.09								.09		1.25
Runyon	...do			.43	.40				.06												.30		.10								.40		1.69
Trenton***	Delaware		.07	.26	.25				.03				.13				T.		T.	.31	T.	.10	.01			T.			T.	T.	.75		1.91
Tuckerton	Coast		.17	.15	.20				.09					.29			.04			T.	.35		.12								.30		1.71
Vineland	Maurice																																
Phila., Pa***	Delaware		.06	.22	15				.03				.14				T		T	.48	T.	.09	T.			T.	T.		T.		.77		1.94
The Sea Coast.																																	
Asbury Park	Coast		.18	.31	.33				.04				.04						T.	.20	.15		.10						T.		.45		1.80
Atlantic City***	...do		.23	.47	.06				.06				.04				.01			.28	T.	.04	.01								.67		1.87
Cape May City	...do		.08	.42	.05				.06				T.				.01			T.	.35					T.	T.				.42		1.39
Long Branch	...do		.29	.56	.25				.09				.03						.01	.30		T.	.09	T.							.47		2.09
Sandy Hook***	...do		.16	.45	.23				.13				.01				T.		.02	.21		.03	.03						T.		.62		1.89

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.05	30.54	14	29.51	8	15.5	44	nw.	8	78	62	72	38
Long Branch	30.02	30.52	14	29.50	8					72	66	57	
Moorestown No. 2										86	62	77	
New York, N. Y.	30.03	30.50	14	29.51	8	15.5	48	sw.	19	70	62	66	50
Philadelphia, Pa	30.06	30.54	14	29.54	8	12.5	41	sw.	19	78	68	68	45
Ridgefield	30.03	30.51	14	29.51	8								
Sandy Hook	30.02	30.51	14	29.49	8	14.3	41	nw.	8	77	66	72	45
Trenton	30.04	30.50	14	29.46	8	9.2	35	sw.	19	78	62	70	38
Verona	30.03	30.48	14	29.52	8	6.8	35	s.	19	72	55	65	42

Daily Temperatures for November, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	61	58	56	54	57	60	63	56	49	46	54	44	52	57	64	67	71	75	68	67	43	45	42	44	40	33	41	41	43	46	....	53.2
	Minimum	25	37	47	48	37	38	39	40	40	27	28	24	35	24	37	47	40	47	49	40	27	30	28	25	29	17	28	24	36	38	....	34.4
Charlotteburg	Maximum	62	59	54	55	53	59	58	58	48	48	50	47	48	55	65	70	69	70	70	66	45	42	40	39	40	32	38	43	43	42	....	52.3
	Minimum	21	31	47	49	38	38	42	35	33	29	45	18	32	23	30	35	45	51	50	39	21	25	28	23	31	17	19	21	36	35	....	32.9
Dover	Maximum	61	56	53	60	54	60	59	50	44	47	51	45	50	54	65	69	69	74	67	58	51	45	41	40	41	35	40	44	44	53	....	52.7
	Minimum	24	35	49	35	37	42	41	34	34	29	29	24	31	24	41	65	49	48	50	33	28	32	25	26	25	17	23	22	37	37	....	33.9
Layton	Maximum	62	59	50	54	56	62	58	47	44	45	52	32	49	50	69	74	73	77	65	56	40	45	40	41	40	28	39	45	44	40	....	51.2
	Minimum	20	30	44	45	33	38	40	38	35	22	23	18	32	20	32	53	46	47	47	38	21	26	25	23	28	13	23	23	36	35	....	31.8
Newton	Maximum	62	58	54	53	54	60	59	51	44	45	49	39	49	52	66	70	70	75	68	63	38	43	40	39	39	30	39	42	43	44	....	51.3
	Minimum	32	39	44	45	38	38	40	37	32	28	32	26	32	27	47	53	50	48	56	36	22	29	28	26	27	15	24	25	37	36	....	35.0
Phillipsburg	Maximum	58	58	57	56	54	60	61	57	46	46	51	38	50	54	65	70	69	75	68	56	47	47	41	41	42	33	43	44	46	54	....	52.9
	Minimum	27	38	51	43	37	40	41	39	34	29	30	26	31	26	26	46	46	47	53	39	31	34	26	26	26	21	27	27	40	40	....	34.9
Sussex	Maximum	62	58	53	54	56	61	60	49	45	47	51	43	....	51	64	74	70	75	65	66	45	42	40	39	40	33	40	42	44	41	....	52.1[a]
	Minimum	22	31	44	48	35	40	37	38	34	24	28	20	....	22	37	51	49	47	47	40	20	27	27	21	26	15	23	20	37	36	....	32.6[a]
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	61	57	55	56	57	62	60	52	46	48	53	40	51	54	65	68	70	74	70	49	42	45	42	42	42	37	41	44	46	54	....	52.8
	Minimum	22	27	41	49	31	37	43	39	35	25	29	22	27	22	41	44	45	45	52	42	21	27	24	23	31	19	21	19	32	36	....	32.4
Elizabeth	Maximum	65	55	59	56	57	64	63	55	47	47	62	48	51	58	65	74	71	75	71	70	51	47	44	44	44	35	42	44	47	51	....	55.1
	Minimum	45	39	51	49	36	42	40	46	37	27	37	27	36	27	49	50	47	46	53	42	26	31	27	25	32	22	29	25	39	41	....	37.4
Flemington	Maximum	64	55	57	57	57	63	65	60	49	47	52	46	53	54	68	72	71	76	70	70	42	48	46	43	45	35	47	43	47	51	....	55.1
	Minimum	26	38	49	49	35	39	42	41	36	28	33	24	36	24	36	49	45	45	54	40	28	29	30	24	32	18	28	23	34	38	....	35.1
Highwood	Maximum	58	57	55	56	53	62	60	48	47	45	50	41	49	56	65	70	69	73	66	59	41	44	42	42	42	32	39	43	47	52	....	52.1
	Minimum	27	37	51	48	34	43	39	40	34	25	32	24	33	26	40	48	49	50	51	37	25	22	26	26	29	20	24	21	37	38	....	34.5
Jersey City	Maximum	60	57	57	58	53	62	61	52	47	49	51	45	47	64	65	70	70	71	69	61	42	49	42	45	42	34	42	44	49	56	....	53.1
	Minimum	40	48	50	48	42	47	44	36	35	35	42	37	37	36	44	53	55	55	51	40	31	35	35	33	30	21	29	34	38	40	....	40.0
Lambertville	Maximum	54	55	57	55	63	61	58	59	45	45	50	42	49	53	65	70	68	72	68	52	40	46	40	41	39	30	41	43	46	51	....	51.6
	Minimum	34	41	50	42	39	42	43	43	35	27	34	28	35	31	41	48	50	53	52	38	29	30	28	29	29	18	27	27	36	39	....	36.6
Little Falls§§	Maximum	64	55	56	55	56	62	61	46	49	49	52	41	53	54	65	72	71	77	70	61	43	46	41	41	43	33	43	45	47	48	....	53.0
	Minimum	25	36	48	50	35	42	44	41	35	27	31	23	31	25	38	49	46	49	51	42	25	30	28	25	30	20	26	22	37	38	....	35.0
New Brunswick	Maximum	63	55	58	57	55	65	61	57	49	46	52	48	52	54	65	73	71	73	72	72	44	48	45	45	43	36	41	44	47	53	....	54.8
	Minimum	30	39	50	50	38	44	44	46	36	27	35	27	37	27	41	49	51	54	55	41	28	33	30	27	33	19	29	25	38	39	....	37.4
Paterson	Maximum	61	57	55	55	54	62	61	52	48	47	51	50	51	56	66	71	70	76	70	70	43	46	43	42	42	34	41	46	48	51	....	54.0
	Minimum	33	41	51	52	40	44	45	43	36	33	37	31	37	33	41	52	52	52	62	40	29	34	32	31	30	24	29	27	39	40	....	38.7
Plainfield	Maximum	61	55	56	58	54	63	62	53	48	48	51	46	44	52	66	71	70	73	70	51	41	49	43	46	44	34	42	44	49	57	....	53.4
	Minimum	26	37	50	50	36	42	40	34	35	26	31	24	35	25	40	52	47	45	51	41	24	33	33	25	30	19	29	22	36	39	....	35.2
Ridgefield	Maximum	62	57	55	55	55	62	61	49	47	46	53	40	51	56	66	71	69	74	67	53	40	45	42	42	43	36	40	42	46	53	....	52.6
	Minimum	28	41	50	44	39	46	42	34	34	30	35	26	34	30	41	51	52	53	51	32	27	33	28	28	26	20	26	25	37	39	....	36.1
Somerville	Maximum	65	54	58	55	56	63	62	58	47	48	54	43	53	55	67	72	72	76	71	60	44	48	43	43	45	35	43	43	47	52	....	54.4
	Minimum	25	38	42	48	36	39	41	41	36	26	32	23	36	24	37	49	48	48	55	40	24	32	27	23	30	17	29	22	35	39	....	34.7
South Orange	Maximum	62	56	55	59	55	65	62	53	49	48	52	47	62	58	67	....	....	....	....	....	....	....	....	....	....	....	....	....	47	50	....	55.1[m]
	Minimum	28	38	50	43	34	38	40	40	34	27	33	25	35	27	39	50	48	47	52	41	24	29	28	25	30	19	27	23	36	39	....	35.0
Verona	Maximum	58	54	53	54	52	60	58	48	44	46	49	40	48	53	64	69	68	73	68	50	40	44	40	40	40	30	38	43	44	53	....	50.7
	Minimum	36	44	49	45	38	43	43	34	34	30	36	28	34	34	43	56	55	55	60	30	26	32	38	30	20	19	27	27	34	39	....	36.6
New York, N. Y.	Maximum	60	56	58	57	53	61	61	52	47	49	51	44	50	54	64	70	68	71	68	52	43	48	42	44	41	33	42	44	48	56	....	52.9
	Minimum	41	48	51	48	43	48	46	36	35	36	43	37	37	38	45	64	55	57	52	35	31	36	34	34	25	21	29	34	39	41	....	40.3
The Southern Interior.																																	
Bellcplain	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	63	56	61	58	56	64	62	61	53	46	53	61	52	57	65	72	69	74	73	70	45	49	47	45	44	43	46	45	51	53	....	56.1
	Minimum	29	36	47	42	38	43	43	45	38	29	34	27	34	26	41	42	49	51	54	44	34	36	33	30	34	22	31	26	36	38	....	37.1
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	65	54	62	58	58	64	62	60	48	46	54	49	53	56	66	74	71	76	73	68	45	47	44	46	45	36	44	46	60	55	....	55.8
	Minimum	25	35	50	49	34	43	40	43	35	24	30	23	35	24	33	42	50	55	54	42	35	33	27	25	31	17	29	20	36	39	....	35.3
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	65	56	63	64	60	67	64	67	56	48	52	48	52	60	68	75	72	78	72	67	49	50	45	48	44	39	44	46	52	56	....	57.6
	Minimum	25	33	53	50	34	41	40	42	37	25	37	23	37	24	40	48	48	53	61	40	34	33	30	26	31	21	28	24	40	39	....	36.6
Lakewood	Maximum	60	66	62	60	55	63	59	61	49	49	50	45	50	57	68	72	70	75	74	66	44	48	44	47	43	33	42	50	50	52	....	55.1
	Minimum	25	35	52	49	35	39	38	39	35	24	33	23	37	23	44	50	49	56	59	39	27	30	29	23	30	20	28	20	35	39	....	35.5
Moorestown	Maximum	68	59	62	62	61	61	64	65	50	48	52	51	55	58	67	73	70	70	72	68	45	45	45	49	45	35	42	45	53	52	....	56.4
	Minimum	30	43	50	50	37	45	44	45	36	26	34	28	35	27	40	49	49	53	58	41	34	32	29	29	34	20	28	28	38	39	....	37.7
Moorestown No. 2	Maximum	64	54	62	58	57	64	63	63	46	46	53	42	54	67	65	74	68	74	72	52	44	48	43	44	43	33	44	45	51	55	....	54.6
	Minimum	30	38	51	45	38	44	42	37	31	25	32	27	30	28	44	48	49	56	62	39	34	35	30	31	25	21	30	30	38	41	....	36.7
Pleasantville§§	Maximum	60	57	63	59	62	68	63	67	47	50	53	53	53	59	68	77	71	77	66	53	46	52	44	60	50	35	45	51	52	57	....	56.9
	Minimum	26	31	50	54	36	38	38	43	36	24	30	25	25	22	....	46	43	53	66	37	32	34	24	25	31	13	23	23	33	33	....	33.9[a]
Runyon	Maximum	54	62	56	66	53	....	....	....	60	53	54	55	54	56	75	73	74	72	71	64	66	49	48	48	44	33	45	44	50	52	....	56.3[c]
	Minimum	32	34	33	40	32	36	34	36	32	21	24	32	26	19	42	40	38	44	42	42	40	24	20	19	22	17	28	22	37	36	....	31.5
Trenton	Maximum	63	55	61	66	58	62	60	61	45	48	51	45	52	56	64	71	69	73	72	52	45	48	43	47	41	33	44	47	48	56	....	54.2
	Minimum	37	44	50	46	42	45	45	37	36	31	38	33	38	34	44	49	51	56	52	39	34	34	32	32	26	21	30	33	38	41	....	38.9
Tuckerton	Maximum	62	59	64	60	60	66	65	66	66	45	52	50	53	58	69	76	73	76	67	64	50	50	48	49	47	41	47	50	52	52	....	57.9
	Minimum	31	36	44	48	35	62	38	44	34	25	38	26	37	27	45	49	48	52	55	37	33	35	27	26	81	18	26	24	38	40	....	36.6
Vincland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia	Maximum	62	56	63	60	57	65	63	63	47	48	54	45	55	57	65	72	68	74	72	55	45	51	44	45	44	35	46	47	61	57	....	55.5
	Minimum	43	49	53	50	46	48	47	40	39	37	43	49	40	41	47	52	53	59	55	40	37	38	36	36	28	35	33	37	42	43	....	42.5
The Sea Coast.																																	
Asbury Park	Maximum	62	56	59	58	67	64	61	69	51	50	51	47	51	60	69	73	70	74	65	58	47	49	48	47	48	49	53	49	50	55	....	56.3
	Minimum	38	45	54	48	39	47	45	42	37	31	41	34	39	34	46	54	53	55	55	40	31	35	31	30	31	21	30	31	39	49	....	40.2
Atlantic City	Maximum	58	56	63	61	57	66	62	66	47	50	52	48	63	56	62	68	64	63	61	56	47	51	45	48	46	34	46	49	52	54	....	54.7
	Minimum	40	47	56	48	45	49	46	38	34	33	39	34	39	38	51	54	54	56	56	40	37	36	32	34	30	22	34	37	42	46	....	41.6
Cape May City	Maximum	60	57	64	58	58	66	62	66	47	62	56	51	62	58	65	71	67	72	64	52	48	52	44	50	46	35	46	49	49	58	....	55.8
	Minimum	38	44	56	51	45	63	60	40	38	30	37	32	36	33	50	53	54	56	52	42	39	40	37	36	28	26	35	34	43	46	....	41.8
Long Branch	Maximum	60	54	57	56	50	62	52	63	40	40	50	46	41	60	62	66	70	74	75	43	40	40	39	44	40	31	37	50	40	56	....	50.9
	Minimum	30	40	53	47	42	45	42	40	35	28	34	28	33	27	42	52	53	68	56	38	28	34	28	27	30	19	26	36	34	42	....	37.9
Sandy Hook	Maximum	58	55	56	55	54	61	58	53	46	46	49	44	49	56	61	66	64	67	66	53	42	47	42	45	42	33	40	44	46	54	....	51.7
	Minimum	42	47	61	49	47	49	48	39	38	37	42	39	41	39	46	52	52	55	53	38	35	36	35	35	30	25	33	35	41	41	....	41.7

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.048	.002	*	*	.060	.128	.082	160	.064	.032	....	.058	.080	.064	.048	.068	.048	.064	.096	.048	.058	.064	*	.112	....	....	....	.256	*	.000	....	[d]1.640
	Wind movement	40	43	....	....	....	....	79	139	92	41	64	46	50	84	78	38	96	102	108	51	98	76	90	59	115	103	32	58	....	....	....	[f]1,782
Runyon	Evaporation	.090	.040	.080	.000	.110	.100	.110	.120	.090	.110	.110	.060	.040	.040	.060	.080	.070	.080	.080	.050	.060	.080	.080	....	....	....	....	....	.080	.040	....	[e]1.860
	Wind movement	9	12	9	13	29	51	54	34	36	58	12	15	18	12	65	68	76	44	35	51	30	64	61	32	66	48	70	70	21	30	....	1,188

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. DECEMBER, 1928. No. 12

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The mean temperature, while decidedly above normal, has been exceeded 10 times in the last 44 years. The month averaged 1.0 degree warmer than December, 1927. Like the two months immediately preceding it, December was relatively warm and dry. No zero temperatures were registered, and it was a month without a cold wave.

Less precipitation has been recorded in only two Decembers, one of these being in 1889 and the other in 1896. The amounts were generally well distributed through the month. The average total snowfall of 2.7 inches is not notable. December totals in past years have varied between a trace, last December, to 21.1 inches in December, 1904.

There is no record previously in December of so many clear days or so few partly cloudy days, as the 15 and 5, respectfully, herein recorded. The wind reached gale force on the coast once or twice during the month, but not so high inland, and no storm damage is reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 36 stations, was 36.3°, which was 3.8° above normal. The highest temperature was 63° at New Brunswick on the 18th, and the lowest, 3°, at Layton and Runyon on the 22d. The greatest daily range of temperature was 42° at Runyon on the 25th. The highest monthly mean temperature was 39.6° at Asbury Park, and the lowest, 32.7° at Layton.

The temperature departure from the normal for the year, 1928, to date, by sections, is: The Highlands, +1.0°; Red Sandstone Plain, +0.5°; Southern Interior, +0.5°; Sea Coast, +0.4°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 1.64 inches, which was 2.29 inches below normal. The average total snowfall at 36 stations was 2.7 inches. The greatest monthly amount was 9.6 inches at Cape May City. The greatest monthly precipitation was 4.63 inches, at Elizabeth, and the least, 0.69 inch at New Milford. The greatest amount of precipitation in any 24 consecutive hours was 3.02 inches at Elizabeth on the 27th. The mean of the number of days on which 0 01 inch or more of precipitation fell was 8, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1928, to date, by sections, is: The Highlands, +1.35 inches; Red Sandstone Plain, —0.01 inch; Southern Interior, —0.21 inch; Sea Coast, —2.57 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 10 miles per hour, which was 4 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 42 miles per hour from the south at Atlantic City on the 17th. High winds occurred generally throughout the State on the 8th, 17th, 18th, 29th and 30th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 15, which was 3 more than normal; partly cloudy, 5, or 4 less than normal; cloudy, 11, or 1 more than normal. The per cent of possible sunshine was 56, which was 4 per cent above normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 30.13 inches, which was 0.03 inch above normal. The highest reading was 30.52 inches on the 24th at Long Branch, and the lowest 29.25 inches on the 18th at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 1.5 feet. The highest stage was 2.8 feet on the 4th. The mean stage at Trenton was 1.0 foot, which was 1.6 feet below the normal. The highest stage was 1.8 feet on the 4th.

Light hail occurred at Asbury Park on the 17th and at Belvidere on the 18th. Dense fog was reported by most of the observers on one or more of the following dates: 3, 4, 13, 14, 16, 17.

ERRATA.

November 1928. Greatest precipitation in 24 hours at Little Falls, 0.41 inch, should be 1.26 inches; at Somerville, 0.44 inch, should be 0.96 inch; at Asbury Park, 0.45 inch, should be 0.61 inch; for the Red Sandstone Plain, 1.17 inches, should be 1.26 inches; for the State, 1.17 inches, should be 1.26 inches.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	35.3	60	6	3.15	4.33	2.47	......	......	......	......	......
1886	29.1	60	−2	3.51	4.65	1.62	......	......	......	......	......
1887	33.7	62	6	5.29	7.32	3.64	......	......	......	12	10
1888	34.9	65	5	3.69	4.95	2.05	......	......	......	8	8
1889	**41.5**	71	8	1.62	3.69	*0.25*	......	......	......	9	9
1890	30.9	56	3	3.89	5.74	2.34	......	11	10	10	8
1891	40.9	71	**9**	4.25	5.32	2.25	......	13	9	9	8
1892	30.4	68	1	1.87	3.09	1.30	......	9	11	11	6
1893	34.9	70	5	3.39	4.66	1.67	......	11	10	10	11
1894	34.8	66	−3	4.36	6.39	1.64	......	12	9	10	9
1895	37.2	70	3	2.61	5.42	1.71	0.4	11	9	11	6
1896	31.3	64	−15	*1.43*	*2.70*	0.85	10.7	14	9	8	4
1897	35.1	69	−3	4.90	6.44	3.07	3.4	8	11	12	11
1898	33.3	66	−2	3.53	4.85	2.38	2.0	12	10	9	9
1899	35.5	69	−1	2.11	4.30	1.29	0.5	14	10	7	7
1900	34.4	64	−2	2.59	3.97	1.47	4.1	14	10	7	6
1901	32.6	68	−8	**7.30**	**9.45**	4.87	2.1	12	9	10	11
1902	31.7	62	−11	7.23	8.99	**5.81**	9.1	13	7	11	13
1903	28.6	56	−13	4.08	5.49	3.20	9.2	14	9	8	9
1904	27.0	60	−15	3.19	5.38	2.06	**21.1**	10	7	14	12
1905	36.3	61	5	3.65	5.60	2.58	1.5	14	8	9	7
1906	33.0	70	−5	3 99	6.18	2.70	1.4	9	8	14	13
1907	36.6	70	−3	4.91	7.13	3.55	5.9	12	8	11	9
1908	34.0	**72**	1	3.63	5.26	2.10	7.8	10	8	13	11
1909	29.8	60	−15	4.45	5.51	3.55	12.6	14	8	9	5
1910	26.5	58	−14	2.79	4.60	1.92	11.3	11	10	10	9
1911	38.4	70	2	3.77	5.09	2.94	5.6	10	7	14	11
1912	36.9	68	−1	4.73	6.33	3.40	11.0	12	9	10	9
1913	37.7	63	−11	3.03	4.59	1.47	0.8	13	9	9	7
1914	31.1	66	−9	5.33	9.12	2.99	2.4	10	6	15	12
1915	31.9	64	3	4.82	7.83	2.19	13.6	12	9	10	8
1916	32.3	70	−8	4.61	6.34	3.35	12.6	13	8	10	11
1917	*24.8*	*54*	*−21*	3.18	5.46	1.55	11.5	13	7	11	8
1918	37.5	66	**9**	3.92	4.94	3.21	0.5	12	7	12	10
1919	28.8	67	−18	2.98	5.14	1.84	6.8	10	8	13	12
1920	36.4	69	7	5.10	6.63	2.86	1.0	11	8	12	8
1921	32.3	64	−4	2.37	3.23	1.62	6.2	13	8	10	9
1922	32.5	65	−8	3.86	5.26	3.09	7.3	9	9	13	12
1923	40.8	69	**9**	4.14	5.14	2.44	2.6	13	7	11	12
1924	32.8	68	−4	2.58	3.42	1.85	0.4	10	8	13	8
1925	34.0	61	−5	2.84	4.58	1.08	0.6	13	7	11	10
1926	28.4	52	−7	3.44	4.74	1.67	8.2	11	7	13	11
1927	35.3	70	2	4.54	5.76	2.80	*T.*	13	6	12	12
1928	36.3	63	3	1.64	4.63	0.69	2.7	15	5	11	8

W. B. O. Philadelphia-1-22-29-810.

Climatological Data for December, 1928

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	35.3	+4.7	59	18	10	22	28	1.31	−2.76	0.44	2.0	6	14	6	11	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	36	34.6	+4.8	58	17	6	22	40	2.13	−2.20	1.03	1.0	8	6	7	18	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	27	......	......	......	......	9	22	....	1.31	−2.35	0.87	1.2	7	11	7	13	e.	Brice E. Riker.
Dover	Morris	600	44	34.6^{a}	+4.7	57^{a}	17	9	22	33^{a}	1.21	−3.09	0.66	1.0	5	12	9	10	......	William C. Harris
Layton	Sussex	480	27	32.7	+5.3	58	18	3	22	37	0.97	−2.97	0.70	0.5	8	13	1	17	sw.	A. M. Depue.
Newton	Sussex	769	44	35.2	+5.1	58	18	9	22	29	1.55	−2.16	0.50	1.0	7	13	2	16	nw.	Irving J. Kern.
Phillipsburg	Warren	363	45	35.2	+3.9	60	17	13	22	33	0.91	−2.83	0.35	1.7	8	18	7	6	......	Town Engineer.
Sussex	Sussex	442	33	33.9	+4.0	58	18	7	22	32	1.13	−2.43	0.59	1.7	6	18	4	9	w.	A. J. W. Mowatt
Means and extremes	......	......	....	34.5	+4.6	60	17	3	22	40	1.32	−2.60	1.03	1.3	7	13	5	13	nw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Mann.
Boonton	Morris	400	§38	34.2	+3.7	62	17	9	22†	39	1.10	−2.88	0.51	......	6	15	1	15	sw.	John Kline.
Chatham	Morris	185	24	......	......	......	......	......	......	....	2.30	−1.87	1.21	0.5	5	23	4	4	......	Paul Molitor, Sr.
Elizabeth	Union	45	49	38.8^{c}	+5.5	61^{c}	18	20	22	25^{c}	4.63	+0.67	3.02	0.8	8	18	4	9	nw.	Union County Park Com.
Flemington	Hunterdon	140	§42	36.4	+4.4	59	18	12	22	34	1.23	−2.53	0.55	2.0	6	18	2	11	nw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	40	35.2	+3.4	58	17†	11	22	31	1.62	−2.59	0.49	4.0	9	14	6	11	nw.	Charles J. Bates.
Jersey City	Hudson	10	30	39.2	+5.1	58	17†	20	22	23	0.87	−3.06	0.38	2.4	8	14	6	11	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	370	41	35.6	+2.0	57	17†	11	22	27	1.27	−2.60	0.29	2.3	8	13	6	12	uw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§25	35.0	+3.5	54	4†	10	24	39	2.09	−2.00	0.36	0.2	7	18	7	6	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	75	37.2	+4.0	63	18	14	22	30	1.64	−2.03	0.75	0.9	8	17	5	9	nw.	N. J. Experiment Station.
New Milford‡‡	Bergen	9	10	......	......	......	......	......	......	....	0.69	......	0.23	......	6	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	57	38.4	+5.3	61	18	17	22	28	1.43	−2.63	0.42	0.5	9	21	4	6	nw.	Marion T. Probert.
Plainfield	Union	120	40	35.9	+3.2	60	17	9	24	37	1.00	−3.06	0.46	0.5	7	12	7	12	nw.	E. D. Pearson.
Ridgefield	Bergen	80	11	35.8	......	59	17	16	22	29	1.16	......	0.60	2.0	8	15	6	10	nw.	George P. Kirsten.
Somerville	Somerset	70	45	36.3^{a}	+4.1	61^{a}	18	9^{a}	22	33^{a}	1.40	−2.45	0.41	1.0	7	15^{a}	5^{a}	10^{a}	w.	Arthur Gerlich.
South Orange	Essex	200	58	37.1^{k}	+5.0	60^{k}	18	12^{c}	23	34^{k}	1.20	−2.72	0.50	T.	6	13	8	10	w.	Everett W. Bird.
Verona	Essex	490	2	35.5	......	58	17	14	22	27	0.90	......	0.32	0.5	9	12	7	12	nw	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	10	......	......	......	......	......	......	....	1.10	......	0.42	......	4	....	....	....	......	Hackensack Water Co.
New York, N.Y.	......	365	58	39.4	+4.4	58	17	20	22	25	0.85	−2.77	0.36	2.3	7	10	10	11	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	36.5	+4.1	63	18	9	22†	39	1.51	−2.29	3.02	1.4.	7	16	5	10	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	34	......	......	61	17	......	......	....	2.24	−1.71	0.95	8.5	12	12^{d}	4^{d}	11^{d}	nw.	Thomas J. Durell.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§42	37.0	+3.2	59	17†	15	22	26	1.58	−2.74	0.39	1.8	9	9	10	12	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hammonton	Atlantic	103	24	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Hightstown	Mercer	120	34	36.0	+3.4	60	18	11	22	34	1.46	−2.23	0.36	2.1	9	17	3	11	w.	Charles Welsh.
Imlaystown	Monmouth	115	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Frank M. Lawrence.
Indian Mills‡‡	Burlington	76	39	36.6	+2.8	61	18	11	23	36	2.68	−1.72	0.54	7.0	10	15	5	11	nw.	James M. Armstrong.
Lakewood	Ocean	54	24	35.6	+2.1	59	18	10	22	30	1.87	−2.77	0.51	7.0	10	17	2	12	w.	R. W. Holman.
Moorestown	Burlington	75	65	37.6	+4.1	61	18	14	22	30	2.00	−1.69	0.50	4.0	9	18	2	11	nw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	36.2	......	61	17	15	22	28	2.22	......	0.78	3.0	8	14	4	13	nw	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	21	......	......	......	......	......	......	....	2.34	−1.78	0.45	4.4	10	....	....	....	....	William L. Flick.
Pleasantville‡‡	Atlantic	26	30	35.2^{a}	......	56^{a}	17	11^{a}	22†	35^{a}	3.02	−1.22	0.53	......	9	19^{a}	1^{a}	10^{a}	nw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	4	35.2	......	61	18	3	22	42	1.52	......	0.38	......	5	12	14	5	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	56	38.2	+3.8	60	17	17	22	26	1.19	−1.97	0.47	1.7	8	11	7	13	nw.	U. S. Weather Bureau.
Tuckerton	Ocean	23	35	37.3	+2.9	56	18†	12	22	31	1.96	−2.55	0.50	4.0	11	20	0	11	nw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa	......	117	57	40.8	+4.5	60	17	21	22	25	1.50	−1.93	0.39	3.2	7	10	8	13	nw.	U. S. Weather Bureau.
Means and extremes	......	......	...	36.5	+3.2	61	17†	3	22	42	2.01	−2.04	0.95	4.4	9	15	5	11	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	39	39.6	+4.6	58	18	21	10	26	1.94	−1.91	0.52	4.0	8	20	6	5	nw.	Information Bureau.
Atlantic City	Atlantic	16	55	39.4	+3.0	56	1	21	22	22	2.03	−1.91	0.51	3.9	8	14	6	11	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	44	38.3	+0.3	57	1	18	22	23	2.25	−1.53	0.80	9.6	10	14	7	10	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	19	34.8	+0.7	58	17	14	22	26	1.43	−3.31	0.46	4.5	8	18	2	11	w.	William D. Martin.
Sandy Hook	Monmouth	22	30	38.8	+4.4	58	17	22	22	22	1.07	−2.97	0.33	2.4	9	11	9	11	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	38.2	+2.6	58	17†	14	22	26	1.74	−2.33	0.80	4.9	9	15	6	10	nw.	
For the State	......	......	....	36.3	+3.8	63	18	3	22	42	1.64	−2.29	3.02	2.7	8	15	5	11	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used i determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford an Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for December, 1928

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.37				.13			T.	.20					T.			.02	.44										.15				1.31
Charlotteburg	Passaic	.74		.03		.20			.05							.03		.04	.74										.30				2.13
Culvers Lake	Delaware	.62		.01	T.	.05				.04					T.	T.		.02	.42										.15				1.31
Dover	Passaic			.02		.15			.10									.66											.28				1.21
Layton	Delaware	.04		.05		.06				.05					T.	.01		.03	.67										.06				0.97
Newton	Delaware	.45		.41		.04				.04					T.			.03	.50										.08				1.55
Phillipsburg	...do					.08			.03	.11					.08			.16	.19									.23	.03				0.91
Sussex	Hudson	.59		.02						.17					.23			.07	T.										.05				1.13
The Red Sandstone Plain.																																	
Bayonne	Coast																																
Boonton ‖‖	Passaic	.11			.01	T.	.10			.04						T.		T.	.51										.33				1.10
Chatham ‖	...do	1.21				T.	.21			.05									.35										.48				2.30
Elizabeth	Coast	.70		.02		.21			T.	.02								.08	.56		.02							3.02					4.63
Flemington	Raritan	.55		T.		.17			T.	.13	T.	T.			.05			.06			T.								.27				1.23
Highwood	Hackensack	.30		.03	T.	.26			*	.32					T.			.18	.31		.01	T.						.21					1.62
Jersey City	Coast			.01		.18			*	.18					T			.08	.30		T.							*	.12				0.87
Lambertville	Delaware	.30				.06			.03	.24					.08			.06	.21										.29		T.		1.27
Little Falls ‖‖	Passaic	1.23			.02	.12	.09			.02						.01			.36										.24				2.09
New Brunswick	Raritan	.34				.18			T.	.02					.01	.01		.08	.67		T.								.33				1.64
New Milford.**	Hackensack			.05		.17												.23	.12									.05	.07				0.69
Paterson	Passaic	.42		.02		.17			.17	.02					T.			.11	.26		.02								.24				1.43
Plainfield	Raritan			.02		.13			.07	T					T.			.12	.34		T.							.01	.31				1.00
Ridgefield**	Hackensack			.05		.17		T.	*	.22					T.			*	.60		T.							*	.12		T.		1.16
Somerville	Raritan	.52				.12			T.	.03					.01	.01		.04	.37										.30				1.40
South Orange	Rahway	.50				.09			T.	.03								.15	.16										.27				1.20
Verona**	Passaic			.01		.18			.06	.03					.01			.22	.10									.14	.15				0.90
Woodcliff Lake**	Hackensack			.30		.20												.42										.18					1.10
New York, N. Y***	Coast			.01		.17			.19	T.					T.			.18	.18		T.							.10	.02				0.85
The Southern Interior.																																	
Belleplain	Tuckahoe	.95				.07			*	.12					*	.50		.01	.20			.19						*	.20				2.24
Bridgeton	Coast																																
Burlington	Delaware	.29				.23			.10	.01					.21	.04		.05	.34		T.	T.							.31				1.58
Clayton	Delaware																																
Hammonton	Mullica																																
Hightstown	Raritan	.28		T.		.24			.10	.14					.05	T.		.12	.24		T.								.29				1.46
Imlaystown	Delaware																																
Indian Mills	Mullica	.22		T.		.20			.54	.06					.43	.10		.06	.32			.35						T.	.40				2.68
Lakewood	Metedeconk	.35		T.		.10			.40	.10					.05			.06	.28		.02							.15	.36				1.87
Moorestown	Delaware	.50		T.		.18			.27	.05					.34			.03	.40									.03	.20				2.00
Moorestown No. 2.	Delaware	.78				.11	.10		.15	.13					T.	.38			.32										.25				2.22
Northfield	Coast	.43				.03			.40	.04					.45				.26		.14	.02						.44	.13				2.34
Pleasantville ‖‖	Coast	.71				.02	.04		.50						.05	.44			.31			.20			.22				.53				3 02
Runyon	...do	.36				.21				.12								.17	.28										.38				1.52
Trenton***	Delaware			T.		.20		T.	.11	.04					.08			.22	.25		T.							.28	.01	T.			1.19
Tuckerton	Coast	.09		T.		.04			.30	.10					.32	.09		.04	.28		.04	.16							.50				1.96
Vineland	Maurice																																
Phila., Pa***	Delaware					.17		T	.27	06					.39			.17	.16		T.							.28					1.50
The Sea Coast.																																	
Asbury Park	Coast	.16				.12			*	.61					T.			.06	.46		.06							.12	.35				1.94
Atlantic City***	...do	.03		T.		.05		.06	.45	T.					.47			T.	.27		.25							.45					2.03
Cape May City	...do	.20		T.		.01			.80	T.					.25	.03	T.	T.	.18		.33	.02						.42	.01	T			2.25
Long Branch	...do			T.		.09			.46	.07					T.			.09	.30		.06							.30	.06	T.			1.43
Sandy Hook***	...do			.01		.12			.25	.06					T.			.13	.16		.01							.23	.10				1.07

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Late	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.14	30.51	24	29.38	18	13.1	42	s.	17	79	64	74	55
Long Branch	30.14	30.52	24	29.25	18					71	66	60	
Moorestown No. 2		30.50	22							85	64	76	
New York, N. Y	30.13	30.50	24	29.28	18	14.5	48	sw.	18	71	59	66	61
Philadelphia, Pa	30.16	30.53	22	29.32	18	10.6	46	sw.	18	70	60	66	57
Ridgefield	30.13	30.51	22	29.28	18								
Sandy Hook	30.12	30.51	24	29.27	18	13.2	41	n.	8	78	66	74	58
Trenton	30.13	30.49	22	29.29	18	8.3	34	nw.	18	76	62	69	54
Verona	30.12	30.48	13	29.28	18	7.0	34	nw.	18	69	50	63	

Daily Temperatures for December, 1928

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	51	45	47	51	50	41	38	37	35	39	44	48	48	46	47	49	53	59	42	44	36	36	35	43	49	44	40	43	42	40	39	43.9
	Minimum	42	37	32	36	34	23	17	28	23	19	28	24	26	28	34	40	41	37	24	26	20	10	13	15	23	18	21	30	29	29	21	26.7
Charlotteburg	Maximum	52	44	45	49	51	40	38	33	32	33	44	50	53	50	49	47	58	54	42	38	34	26	37	49	52	49	44	44	42	36	40	43.7
	Minimum	41	31	30	35	37	24	11	28	21	18	26	31	22	35	29	42	43	37	22	26	19	6	6	9	28	16	18	33	28	26	16	25.6
Dover	Maximum	53	47	47	50	47	40	37	34	34	36	45	49	51	48	51	48	57	....	45	38	32	30	35	46	50	45	42	43	43	37	39	43.3ᵃ
	Minimum	39	31	34	34	28	19	15	26	23	19	27	31	26	30	32	33	43	29	23	27	15	9	10	13	28	19	31	34	31	25	19	25.9
Layton	Maximum	48	45	44	49	48	28	32	36	32	34	46	53	49	42	45	48	56	58	44	35	34	28	39	45	52	45	38	45	42	37	38	42.7
	Minimum	27	31	28	33	29	18	12	23	23	18	24	18	22	30	26	42	40	32	19	24	19	3	8	9	15	15	17	32	26	26	16	22.7
Newton	Maximum	50	45	46	50	43	38	35	34	35	36	45	57	53	44	48	47	55	58	41	37	38	29	38	45	46	46	42	44	42	39	38	43.4
	Minimum	38	36	34	37	28	25	18	27	21	18	26	28	28	33	28	41	41	32	23	28	18	9	13	18	22	28	25	33	32	24	22	26.9
Phillipsburg	Maximum	53	46	45	51	47	36	36	37	36	38	45	43	47	41	48	49	60	59	44	37	33	27	44	35	50	42	40	44	42	37	36	42.8
	Minimum	42	34	31	36	30	22	20	30	24	22	29	25	29	30	36	43	45	31	25	28	20	13	17	15	17	17	25	33	29	28	29	27.6
Sussex	Maximum	46	44	46	49	48	38	35	36	33	33	46	50	50	44	46	48	49	58	43	37	35	30	38	46	52	46	40	45	42	37	40	42.9
	Minimum	37	34	31	38	30	17	13	24	22	18	23	25	23	34	29	42	41	36	22	25	20	7	10	12	21	14	19	35	26	28	17	24.9
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	48	49	49	52	48	38	37	36	37	37	47	51	52	47	53	50	62	44	43	40	31	32	38	48	52	49	42	45	44	39	38	44.5
	Minimum	36	29	30	30	32	25	15	17	23	21	22	25	24	26	30	32	40	41	25	24	22	9	9	11	13	17	18	26	25	29	19	24.0
Elizabeth	Maximum	55	50	55	58	54	42	37	36	36	40	47	46	51	49	51	50	57	61	44	41	41	33	31	47	47	48	50	....	48	....	....	46.6ᶜ
	Minimum	43	34	33	33	34	24	23	33	28	26	25	30	31	33	39	38	44	41	30	30	27	20	22	22	22	27	29	40	35	34	28	30.9
Flemington	Maximum	55	47	45	55	48	41	36	37	35	41	47	53	52	47	55	49	56	59	45	40	38	34	38	48	55	50	45	47	43	41	41	45.9
	Minimum	42	35	27	35	34	23	18	29	25	18	25	25	28	27	36	43	43	36	24	26	21	12	13	14	21	22	22	32	30	28	23	27.0
Highwood	Maximum	53	48	48	50	49	37	36	35	31	36	44	44	46	44	48	51	58	58	43	40	40	29	34	45	53	44	46	46	43	38	37	43.7
	Minimum	41	30	30	35	34	22	19	27	24	20	18	23	27	33	32	42	43	36	25	29	23	11	15	14	23	20	25	34	31	26	20	26.8
Jersey City	Maximum	56	49	51	54	51	38	39	37	34	40	46	48	51	52	51	50	58	58	44	42	38	32	36	45	51	47	48	46	45	37	40	45.6
	Minimum	43	38	41	37	33	29	27	30	26	23	30	36	37	38	39	42	44	35	31	34	22	20	24	26	32	33	36	37	33	30	29	32.7
Lambertville	Maximum	55	45	47	49	46	35	36	35	34	46	43	47	47	44	48	48	57	57	42	40	35	27	34	44	49	42	42	44	41	37	39	43.1
	Minimum	40	36	31	35	28	23	21	29	24	19	27	30	30	33	35	43	44	33	23	27	21	11	16	22	26	25	27	33	30	27	24	28.2
Little Falls§§	Maximum	49	51	47	54	50	40	37	35	35	38	48	51	54	46	50	47	52	44	44	38	32	28	33	49	54	48	44	45	42	35	38	43.8
	Minimum	39	30	31	31	34	25	18	22	19	22	26	27	27	30	29	35	42	42	26	27	23	11	11	10	20	20	23	32	32	30	20	26.3
New Brunswick	Maximum	56	48	51	53	51	42	37	35	35	39	45	49	52	47	51	50	59	63	45	41	41	34	35	47	52	45	46	46	43	41	40	45.8
	Minimum	44	34	32	33	37	22	20	30	26	22	27	27	29	29	36	42	45	37	25	29	23	14	17	17	25	23	26	35	31	29	22	28.6
Paterson	Maximum	54	50	50	52	50	39	38	36	36	38	46	45	51	47	50	50	59	61	44	41	41	31	35	47	53	49	45	48	45	47	38	45.7
	Minimum	44	35	34	36	39	27	24	32	27	23	30	32	33	38	33	45	46	37	27	31	25	17	20	19	30	28	29	38	32	30	25	31.2
Plainfield	Maximum	55	50	52	54	51	38	38	36	34	39	44	49	50	50	51	51	60	59	44	41	32	30	36	46	51	46	47	45	45	37	39	45.2
	Minimum	43	33	30	33	33	20	18	30	25	21	28	24	26	29	35	42	43	35	21	25	22	10	14	9	21	23	22	35	27	27	21	26.6
Ridgefield	Maximum	55	49	50	52	48	38	36	34	30	38	46	46	48	45	49	50	59	58	43	41	34	29	33	46	51	45	46	44	42	37	41	44.0
	Minimum	37	35	34	33	28	24	22	24	23	19	24	29	28	35	31	42	44	29	25	31	19	16	17	18	25	23	28	35	31	27	23	27.7
Somerville	Maximum	55	49	50	54	49	38	36	36	36	39	46	44	52	46	52	50	58	61	45	39	40	32	38	48	52	48	47	46	43	38	....	45.6ᵃ
	Minimum	45	33	30	33	35	21	16	29	26	21	26	24	26	27	37	44	44	35	21	27	19	9	12	15	20	20	22	36	27	29	....	27.0ᵃ
South Orange	Maximum	54	50	....	....	....	....	....	....	....	....	....	....	....	49	52	50	56	60	46	38	39	31	32	49	53	46	41	47	44	40	39	45.8ᵏ
	Minimum	42	30	30	48	48	16	16	27	22	18	....	....	....	45	35	42	42	36	21	26	22	13	12	15	24	25	25	36	27	29	22	28.4ᶜ
Verona	Maximum	52	48	48	50	47	36	35	33	31	35	44	45	50	46	49	48	58	56	42	39	31	28	33	35	50	44	43	44	41	35	37	42.4
	Minimum	39	35	36	36	28	24	22	24	22	20	27	32	31	37	33	43	44	29	26	30	17	14	16	21	30	28	30	34	31	25	22	28.6
New York, N. Y.	Maximum	56	49	51	53	51	39	39	38	31	40	48	47	51	58	51	50	58	57	44	43	39	32	37	45	50	48	48	47	45	38	41	45.8
	Minimum	42	39	41	38	32	29	28	25	24	23	30	38	39	39	41	43	46	32	31	35	22	20	25	27	32	34	37	37	34	30	29	33.0
The Southern Interior.																																	
Belleplain	Maximum	57	55	54	55	54	43	38	36	33	37	46	....	56	43	54	51	61	59	47	46	40	37	43	48	55	51	52	47	48	37	....	47.7ᵇ
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	56	51	49	53	50	44	36	36	35	40	45	46	46	42	54	51	59	59	46	43	40	33	38	45	50	47	44	47	43	41	42	45.5
	Minimum	44	41	27	38	39	27	21	30	23	21	28	33	30	29	36	34	40	37	27	29	25	15	17	22	24	25	25	26	28	25	22	28.6
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	56	49	53	52	49	40	37	36	33	37	43	49	54	45	50	50	59	60	46	42	40	32	38	46	54	50	47	46	45	41	42	45.8
	Minimum	42	34	24	31	34	23	20	28	25	19	22	22	28	27	34	40	44	37	25	28	23	11	14	13	20	17	22	33	26	28	21	26.3
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	56	50	51	52	51	41	37	35	32	38	45	48	56	49	51	51	59	61	48	45	40	32	38	49	52	47	48	48	46	42	46	46.6
	Minimum	45	30	27	29	33	22	15	30	26	20	23	22	26	29	37	38	45	40	20	30	25	15	11	13	20	22	24	32	27	30	16	26.5
Lakewood	Maximum	56	48	52	51	50	40	37	35	32	36	42	45	49	45	48	50	58	59	45	47	40	30	36	45	50	43	47	45	43	39	40	44.6
	Minimum	42	29	24	30	34	23	18	28	25	19	24	23	26	28	37	35	43	36	23	27	24	10	15	15	26	24	23	33	27	29	20	26.5
Moorestown	Maximum	55	53	48	52	51	40	42	35	35	42	48	51	54	46	55	51	58	61	49	47	39	37	40	48	47	50	42	48	46	38	49	47.0
	Minimum	43	36	28	35	35	24	20	28	24	19	28	26	29	28	35	40	43	38	24	29	24	14	18	18	21	27	25	32	30	28	21	28.1
Moorestown No. 2	Maximum	53	50	48	52	50	38	36	33	33	37	45	50	52	42	50	51	61	45	47	43	31	32	37	47	51	46	42	48	44	36	44	44.3
	Minimum	38	32	29	37	28	24	23	27	25	21	28	26	28	29	36	43	46	29	26	31	20	15	19	19	26	28	25	34	31	28	23	28.2
Pleasantville§§	Maximum	52	51	54	52	53	53	37	37	32	38	45	49	53	45	52	52	56	46	47	42	33	32	40	....	55	46	48	48	48	37	44	45.9
	Minimum	42	25	25	23	29	22	26	24	24	19	20	18	20	29	36	29	42	42	21	25	26	11	15	13	....	11	21	28	25	25	16	24.4
Runyon	Maximum	56	51	51	54	54	42	36	40	34	40	45	40	53	44	52	52	59	61	56	42	36	33	36	48	54	50	50	48	44	38	44	46.8
	Minimum	43	27	25	32	30	18	13	24	22	21	22	22	17	25	28	29	42	35	34	32	18	3	8	8	12	11	17	36	34	25	15	23.5
Trenton	Maximum	56	48	52	52	49	38	39	35	35	37	47	51	54	46	51	50	60	58	47	46	36	33	37	48	51	48	46	46	43	36	43	45.7
	Minimum	40	39	36	39	29	25	26	27	25	21	31	34	34	31	38	43	45	32	28	34	21	17	21	24	28	30	30	33	34	30	27	30.7
Tuckerton	Maximum	55	51	52	54	53	50	42	38	33	39	46	49	52	49	51	52	53	56	45	48	42	35	40	47	55	56	48	49	48	44	43	47.6
	Minimum	41	28	27	32	31	22	19	29	25	19	23	25	28	30	38	32	44	33	24	31	24	12	19	17	24	25	27	32	29	26	20	27.0
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia	Maximum	57	51	51	53	52	39	39	37	35	41	49	49	51	47	53	53	60	60	46	45	41	35	40	45	54	48	48	49	47	39	45	47.1
	Minimum	43	41	38	43	33	28	29	28	26	24	36	41	39	40	42	46	47	35	31	37	25	21	26	31	33	34	34	37	37	32	31	34.5
The Sea Coast.																																	
Asbury Park	Maximum	56	50	51	53	51	48	47	39	38	47	43	43	53	48	50	51	54	58	48	47	47	37	38	47	51	48	48	46	45	39	42	47.2
	Minimum	45	38	35	38	34	25	25	29	27	21	28	31	35	35	41	44	45	33	27	35	24	28	24	25	30	30	33	36	34	29	26	31.9
Atlantic City	Maximum	56	52	54	54	53	39	38	33	32	38	46	49	51	46	50	52	54	53	45	49	40	32	39	44	52	46	48	47	47	37	43	45.8
	Minimum	38	35	41	40	31	26	29	30	28	21	29	33	37	37	41	43	46	36	32	40	24	21	26	27	35	33	34	34	36	30	29	33.0
Cape May City	Maximum	57	52	56	50	53	37	41	32	34	36	43	49	52	46	55	50	54	52	48	47	38	36	42	46	47	49	48	47	46	38	44	46.0
	Minimum	39	33	42	36	32	25	24	29	28	27	27	30	30	37	36	38	45	29	27	38	24	18	25	24	29	29	29	34	34	27	24	30.6
Long Branch	Maximum	47	49	45	52	50	34	35	34	30	33	38	40	38	48	46	47	58	43	46	47	39	30	34	45	50	38	47	42	39	38	34	41.8
	Minimum	43	33	30	34	34	22	20	22	27	19	23	27	29	30	39	42	45	31	25	30	20	14	17	19	27	25	26	34	30	27	20	27.9
Sandy Hook	Maximum	54	48	50	51	40	36	38	38	34	37	43	42	48	46	47	47	58	57	44	44	38	29	34	44	47	43	46	44	43	37	39	43.7
	Minimum	44	40	41	38	34	29	29	29	28	26	33	37	36	36	39	43	44	35	30	37	25	22	28	28	33	35	36	37	37	32	30	33.9

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.064	.032	....	.036	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	***
	Wind movement	35	22	29	30	93	36	63	125	182	48	32	16	14	27	92	*	150	64	67	80	56	57	37	*	55	27	54	52	76	67	28	1,71
Runyon	Evaporation	.060	.080	.080	.060	.010	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	***
	Wind movement	91	21	22	21	32	16	17	70	68	62	16	12	10	4	9	11	34	68	40	34	110	6	12	12	20	27	19	35	61	64	12	1,13

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. **** Pan frozen on days record is missing.

51.05
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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION,

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIII. ANNUAL SUMMARY, 1928. No. 13

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Thirty stations have given us 12 months of temperature record for 1928, and 32 stations have supplied full precipitation records for the year. Owing to the thinner distribution of recording stations in southern New Jersey than in the northern part, it is probable that the State's mean temperature for the year, 52.0°, as deduced from the available observations, is somewhat lower than would be shown if there were as ample a distribution of stations in the south as in the north. With the exception of Lakewood and Pleasantville, all of the stations with annual mean temperatures below 52.0° are found in the northern half of the State, but several stations in the northern half are above the general mean of 52.0°. Lowest annual means, the few 50.0° or lower are found in northern portions of Sussex, Morris, and Passaic counties. Layton, Sussex County, with 48.9° averaged lowest. Burlington, Burlington County, on the Delaware River, averaged highest, with 53.9°. The difference between the coolest and the warmest station was thus only 4.0°. The larger cities, Jersey City, 53.6°; Paterson, 53.0°; and New Brunswick, 53.0°, have the highest annual means for northern Jersey.

The computed mean temperature of the State for the year equals that of 1927. The slightly different departure from normal is due to the method used in determining departures, wherein from month to month the means of actually recorded departures at stations are taken, and not the departures from assumed monthly or annual normals for the State or the districts in which it is divided. The annual mean temperature for 1928, somewhat warmer than the average, is not far enough from normal to make the year at all remarkable. Nor do temperatures otherwise show particularly notable facts. The maximum for the year was under 100°; Tuckerton and Belleplain reported 99° on August 3d and 4th, respectively. The year's lowest, −15° at Layton on January 30th, while lower than the extreme minimum of last year and the year before, is frequently exceeded. August was the warmest month, with a monthly mean of 74.5°; July next, with 74.2°. The coldest month was February, 32.1°, averaging just above the freezing point. January was next to lowest, with 32.5°.

Precipitation was nearly 3.50 inches less, in average, than in 1927, varying from 39.71, at Trenton, to 55.33 at Belvidere, with an average total for the year of 46.22 inches. Stations exceeding 50.00 inches were Belvidere, Dover, Chatham, and Little Falls. All stations except the few mentioned fell between 40 and 50 inches. Greatest precipitation in any one month was 14.26 inches, at Belvidere in August. The least was 0.24 inch, at Asbury Park in October. The mean amounts for the State differed little in June, July, and August; July, with 6.86 inches, having the greatest. Least precipitation, 1.19 inches, occurred n October, with December and November following and both under 2.00 inches. Snowfall averaged 21.5 inches, which is about 10 inches less than normal. The totals for the year varied from 10.9°, at Culvers Lake, to 9.1 inches, at Sandy Hook. Prevailng wind direction for the year was southwest, and the highest recorded wind velocity of the year was 80 miles per hour from the southeast at Atlantic City on February 23d.

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Average precipitation	Average snowfall
	Mean	Highest	Lowest		
1885	50.5	100	−2	37.87	......
1886	50.2	98	−10	46.54	......
1887	51.1	102	−6	47.66	......
1888	50.0	99	−12	52.20	......
1889	52.8	95	−3	**63.33**	......
1890	53.2	101	0	49.34	......
1891	53.2	102	1	47.98	......
1892	51.4	105	−6	42.04	......
1893	50.8	103	−21	47.90	......
1894	53.0	106	−11	47.37	......
1895	51.7	**109**	−12	*37.29*	25.7
1896	51.7	105	−15	42.51	39.5
1897	52.0	102	−6	51.72	25.8
1898	53.2	107	−15	52.35	34.3
1899	52.1	103	−21	45.84	44.3
1900	53.8	104	−9	42.71	23.3
1901	51.4	107	−8	51.80	14.1
1902	51.8	100	−11	59.44	40.1
1903	51.7	100	−16	56.25	22.3
1904	*49.3*	100	**−34**	43.78	48.5
1905	51.3	102	−18	42.06	32.9
1906	52.8	98	−15	46.38	23.4
1907	50.4	96	−22	51.65	54.1
1908	52.6	106	−17	42.58	35.3
1909	52.0	100	−15	40.86	29.9
1910	52.0	99	−15	39.73	33.3
1911	52.6	104	−12	50.36	30.0
1912	51.3	100	−32	46.61	35.1
1913	**54.2**	100	−11	46.99	5.2
1914	51.4	99	−12	39.23	41.1
1915	52.5	98	−3	47.37	39.4
1916	51.2	100	−18	38.17	49.6
1917	49.6	104	−21	40.80	40.4
1918	51.2	108	−16	37.65	25.3
1919	52.5	103	−12	52.10	10.9
1920	51.2	98	−17	51.87	33.4
1921	54.1	100	−5	38.16	23.0
1922	52.6	98	−11	41.57	30.8
1923	51.9	106	−14	40.38	39.8
1924	50.7	102	−6	44.17	24.3
1925	52.1	103	−20	42.15	26.8
1926	50.0	105	−11	44.41	32.2
1927	52.0	99	−12	49.68	13.7
1928	52.0	99	−15	46.22	21.5

MONTHLY STATE DATA FOR 1928

Month	Temperature				Precipitation					
	Mean	Departure from normal	Highest	Lowest	Average	Departure from normal	Greatest	Least	Snow	Departure from normal
January	32.5	+2.6	65	−15	2.26	−1.35	3.97	1.37	8.3	+0.5
February	32.1	+2.4	63	−6	4.05	+0.30	5.63	2.17	4.4	−4.5
March	38.3	−0.4	82	6	2.84	−1.08	3.82	1.70	4.9	−1.0
April	47.4	−1.9	85	16	5.26	+1.64	7.16	3.82	0.9	−0.6
May	58.0	−2.2	93	27	2.23	−1.47	3.49	1.26	0.0	0.0
June	66.6	−1.7	93	36	6.75	+2.96	10.34	3.03	0.0	0.0
July	74.2	+0.8	96	41	6.86	+2.05	10.22	2.21	0.0	0.0
August	74.5	+2.7	99	45	6.72	+1.98	14.26	3.33	0.0	0.0
September	62.6	−2.8	90	29	4.52	+0.95	9.62	1.54	0.0	0.0
October	56.1	+1.3	90	16	1.19	−2.56	2.58	0.24	T.	0.0
November	45.1	+2.4	78	13	1.90	−1.24	2.76	1.20	0.3	−0.9
December	36.3	+3.8	63	3	1.64	−2.29	4.63	0.69	2.7	−3.7
Year	52.0	+0.6	99	−15	46.22	−0.11	14.26	0.24	21.5	−10.2

KILLING FROSTS

Stations	Last in spring	First in autumn
The Highlands and Kittatinny Valley		
Belvidere	May 10	Oct. 27
Charlotteburg	do. 10	Sept. 25*
Culvers Lake	Apr. 28*	do. 25
Dover	May 25	Oct. 1
Layton	do. 13	Sept. 27
Newton	Apr. 28*	Oct. 26*
Phillipsburg	do. 27*	do. 15*
Sussex	May 15*	Sept. 27*
The Red Sandstone Plain		
Bergen Point	....	....
Boonton	May 10*	Sept. 27*
Chatham	....	Oct. 26
Elizabeth	Apr. 21	do. 29*
Flemington	do. 27*	do. 27
Highwood	do. 27*	do. 26
Jersey City	do. 16	do. 30
Lambertville	do. 18	do. 26*
Little Falls	do. 27*	do. 27*
New Brunswick	do. 27*	do. 27
Paterson	do. 18*	do. 27*
Plainfield	do. 21*	do. 27
Ridgefield	do. 27	do. 27
Somerville	do. 27*	do. 26
South Orange	Apr. 27*	Oct. 26*
Verona	do. 21*	do. 27
The Southern Interior		
Belleplain	May. 25*	Sept. 25*
Bridgeton	Apr. 21	....
Burlington	do. 18*	Oct. 27
Clayton	do. 18	....
Highstown	do. 27*	Oct. 27
Indian Mills	do. 27*	do. 27
Lakewood	do. 27*	do. 27*
Moorestown	do. 18	do. 27
Northfield	do. 17	do. 27
Pleasantville	do. 29*	Sept. 25*
Runyon	May 24*	do. 25*
Trenton	Apr. 18	Oct. 27
Tuckerton	do. 21*	do. 27
The Sea Coast		
Asbury Park	Apr. 18*	Oct. 27*
Atlantic City	do. 18	do. 30
Cape May City	do. 18	do. 27
Long Branch	do. 18*	do. 27
Sandy Hook	do. 1	Nov. 26

* No frost reported; temperature 32° or below.

W. B. O. Philadelphia-2-11-29-1050.

Climatological Data for the Year 1928

STATION	Counties	Elevation, feet	Temperature (degrees Fahrenheit)						Precipitation (inches)							Number days with .01 or more	Sky			Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall (unmelted)		Number clear days	Number partly cloudy days	Number cloudy days	
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	37	51.7	97	Aug. 4	−12	Jan. 30	37	55.33	14.26	Aug.	0.78	Oct.	25.8	121	205	57	104	......
Charlotteburg	Passaic	719	36	49.8	94	July 8†	−4	do. 30†	36	49.07	9.63	do.	0.89	do.	29.6	136	32	107	227	w.
Culvers Lake	Sussex	848	......	......	......	......	−4	do. 30	27	47.72	10.34	June	0.28	do.	40.9	136	186	75	105	e.
Dover	Morris	600	44	49.9	95	July 8	1	do. 30†	44	51.26	10.22	July	0.51	do.	29.0	127	80	176	110	......
Layton	Sussex	480	27	48.9	94	July 8†	−15	Jan. 30	27	47.27	9.22	June	0.45	Oct.	38.5	117	147	46	173	sw.
Newton	Sussex	769	45	50.4	92	Aug. 4	−2	do. 30	42	......	8.11	Aug.	1.07	do.	25.3	131	......	......	......	sw.
Phillipsburg	Warren	363	37	......	94	July 8†	−10	do. 30	45	......	......	......	0.74	do.	28.6	112	198	99	69	......
Sussex	Sussex	442	30	50.0	94	Aug. 4	−11	do. 30	33	......	......	......	0.80	do.	23.6	120	......	......	......	w.
Means and extremes	......	......	......	50.1	97	Aug. 4	−15	Jan. 30	......	50.13	14.26	Aug	0.28	Oct.	30.2	125	142	93	131	w.
The Red Sandstone Plain.																				
Bayonne	Hudson	37	30	......	......	......	......	......	30	......	......	......	......	......	......	......	......	......	......	......
Boonton	Morris	400	20	49.8	94	Aug. 5	1	Jan. 30	38	48.30	10.08	Aug.	0.76	Oct.	......	123	193	4	169	sw.
Chatham	Morris	185	......	......	......	......	......	......	24	53.13	8.53	July	1.36	do.	18.0	124	230	75	61	......
Elizabeth	Union	45	48	......	96	Aug. 4	2	Jan. 30	49	49.90	8.79	do.	1.50	do.	15.0	137	......	......	......	sw.
Flemington	Hunterdon	140	31	52.4	95	Aug. 5	−3	Jan. 30	42	45.65	6.55	June	1.23	Dec.	27.0	130	215	56	95	w.
Highwood	Bergen	90	38	50.7	92	do. 4	−5	do. 30	40	49.62	9.10	July	1.11	Oct.	29.5	125	144	79	143	nw.
Jersey City	Hudson	10	30	53.6	97	do. 5	6	Feb. 26	30	41.71	7.78	do.	0.87	Dec.	15.4	131	124	144	98	nw.
Lambertville	Hunterdon	*430	41	51.4	93	do. 4†	1	Jan. 30	41	48.68	7.50	June	1.27	do.	28.5	141	197	59	110	nw.
Little Falls	Passaic	180	14	51.4	95	July 8†	−1	Jan. 30	25	51.06	10.08	July	0.91	Oct.	18.1	129	163	104	99	nw.
New Brunswick	Middlesex	110	71	53.0	94	Aug 4	4	do. 30	75	45.52	8.66	do.	1.54	Jan.	14.2	122	165	127	74	sw.
New Milford	Bergen	9	......	......	......	......	......	......	10	......	......	......	0.69	Dec.	......	......	......	......	......	......
Paterson	Passaic	80	53	53.0	96	Aug. 4	7	Feb. 26	57	49.40	8.04	Aug.	0.83	Oct.	21.0	131	214	61	91	nw.
Plainfield	Union	120	37	51.5	97	do. 4†	0	Jan. 30	40	49.53	9.72	July	1.00	Dec.	17.8	131	117	142	107	sw.
Ridgefield	Bergen	80	11	......	95	July 8†	......	......	11	......	7.64	July	1.16	Dec.	......	......	......	......	......	nw.
Somerville	Somerset	70	44	51.6	96	Aug. 4	−3	Jan. 30	45	40.74	7.29	June	1.23	Nov.	13.7	120	......	......	......	w.
South Orange	Essex	200	57	......	96	July 9	4	do. 30†	57	......	......	......	......	......	13.6	......	......	......	......	w.
Verona	Essex	490	3	50.4	90	Aug. 4†	3	Feb. 26	3	48.16	9.05	July	0.84	Oct.	26.2	143	120	118	128	nw.
Woodcliff Lake	Bergen	100	......	......	......	......	......	......	10	......	......	......	......	......	......	......	......	......	......	......
New York, N. Y.	......	365	58	52.9	92	July 9	6	Feb. 26	58	40.73	7.72	July	0.85	Dec.	13.8	133	83	155	128	nw.
Means and extremes	......	......	......	51.7	97	Aug. 4†	−5	Jan. 30	......	47.80	10.08	‡	0.69	Dec.	19.8	130	171	88	107	nw.
The Southern Interior.																				
Belleplain	Cape May	30	33	......	99	Aug. 4	−8	Jan. 30	34	......	6.94	Sept.	1.25	Oct.	19.9	122	......	......	......	......
Bridgeton	Cumberland	90	41	......	......	......	......	......	46	......	......	......	......	......	......	......	......	......	......	......
Burlington	Burlington	12	16	53.9	96	Aug. 5	−4	Jan. 30	42	43.38	6.91	June	1.12	Oct.	13.8	125	158	94	114	sw.
Clayton	Gloucester	130	25	......	......	......	......	......	28	......	......	......	......	......	......	......	......	......	......	......
Hightstown	Mercer	120	34	52.5	95	Aug. 4†	−9	Jan. 30	35	49.83	9.46	July	1.46	Dec.	......	120	188	82	96	sw.
Imlaystown	Monmouth	115	35	......	......	......	......	......	38	......	......	......	......	......	......	......	......	......	......	......
Indian Mills	Burlington	76	39	53.2	98	Aug. 4	−9	Jan. 30	38	51.31	7.80	Aug.	1.06	Oct.	32.8	116	140	118	108	sw.
Lakewood	Ocean	54	24	51.9	94	do. 4	−5	do. 30	24	49.07	7.09	do.	0.73	do.	20.6	136	......	......	......	sw.
Moorestown	Burlington	75	65	53.4	98	Aug. 4	−4	Jan. 30	65	41.84	7.99	June	1.61	Oct.	21.5	106	177	83	106	sw.
Moorestown No. 2	Burlington	......	......	......	96	do. 4	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Northfield	Atlantic	25	......	......	......	......	......	......	21	43.08	7.67	Sept.	1.14	Oct.	......	114	......	......	......	......
Pleasantville	Atlantic	26	5	51.8	95	Aug. 3	6	Jan. 4	30	46.04	8.46	do.	1.25	Nov.	......	116	......	......	......	sw.
Riverton	Burlington	......	2	......	......	......	......	......	2	......	......	......	......	......	......	......	......	......	......	......
Runyon	Middlesex	18	5	......	96	Aug. 4	−4	Jan. 30	5	48.81	9.37	July	1.52	Dec.	......	107	172	145	49	w.
Trenton	Mercer	190	56	53.1	96	do. 4	7	do. 30	56	39.71	7.17	do.	1.19	do.	20.7	124	103	112	151	sw.
Tuckerton	Ocean	23	30	53.1	99	do. 3	7	Feb. 26	35	43.51	9.62	Sept.	1.60	Oct.	......	121	187	45	134	sw.
Vineland	Cumberland	109	58	......	......	......	......	......	58	......	......	......	......	......	......	......	......	......	......	......
Philadelphia, Pa.	......	117	57	55.4	95	Aug. 4	11	Feb. 26	57	39.37	6.77	June	0.73	Oct.	18.4	117	102	125	139	sw.
Means and extremes	......	......	......	52.9	99	Aug. 3†	−9	Jan. 30	......	45.66	9.62	Sept.	0.73	Oct.	21.6	119	161	97	108	sw.
The Sea Coast.																				
Asbury Park	Monmouth	22	38	53.0	95	Aug. 3	8	Jan. 30†	39	41.06	6.98	June	0.24	Oct.	11.0	113	222	100	44	nw.
Atlantic City	Atlantic	16	55	53.4	88	July 28	10	do. 30	55	44.86	9.16	Sept.	1.38	do.	16.4	122	138	132	96	s.
Cape May City	Cape May	17	41	53.8	92	do. 20	10	do. 30	44	......	6.72	do.	1.11	do.	16.2	116	131	120	115	nw.
Long Branch	Monmouth	25	20	50.4	95	Aug. 30	0	do. 30	20	46.35	8.34	June	0.60	do.	12.1	136	133	123	110	nw.
Sandy Hook	Monmouth	22	30	52.8	93	do. 4	9	Feb. 26	30	44.05	8.42	July	1.07	Dec.	9.1	131	108	122	136	sw.
Means and extremes	......	......	......	52.7	95	Aug. 3†	0	Jan. 30	......	44.08	9.16	Sept.	0.24	Oct.	13.0	124	146	120	100	nw.
For the State	......	......	......	52.0	99	Aug. 3†	−15	Jan. 30	......	46.22	14.26	Aug.	0.24	Oct.	21.5	125	158	97	111	sw.

* Elevation corrected to 430 feet from 370 feet.

† Also on other dates

‡ July & August.

Monthly and Annual Precipitation for the Year 1928, with Departures from the Normal

STATIONS	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	3.05	−0.49	4.29	+0.31	3.19	−0.66	5.14	+1.48	2.44	−1.39	6.52	+2.52	8.91	+3.93	14.26	+9.65	2.97	−0.80	0.78	−2.89	2.47	−0.77	1.31	−2.76	55.33	+8.13
Charlotteburg	2.92	−0.63	5.01	+0.85	2.97	−1.23	4.73	+0.41	1.79	−2.41	7.25	+3.13	6.32	+1.49	9.63	+5.01	3.06	−1.36	0.89	−3.58	2.37	−1.15	2.13	−2.20	49.07	−1.67
Culvers Lake	2.21	−0.97	3.20	+0.03	3.26	−0.21	4.38	+0.56	1.60	−2.03	10.34	+5.73	7.05	+2.48	10.31	+5.89	1.54	−3.00	0.28	−3.90	2.24	−0.56	1.31	−2.35	47.72	+1.67
Dover	2.67	−1.72	4.63	+0.46	3.23	−0.76	4.91	+1.15	1.99	−1.95	7.38	+3.35	10.22	+4.95	8.57	+3.81	3.22	−0.87	0.51	−3.56	2.72	−0.92	1.21	−3.09	51.26	+0.85
Layton	3.03	+0.14	3.62	+0.78	3.59	+0.22	5.07	+1.46	2.18	−1.07	9.22	+5.43	7.55	+3.29	6.95	+3.05	2.41	−1.51	0.45	−3.17	2.23	−0.26	0.97	−2.97	47.27	+5.39
Newton	1.74	−1.87	3.02	−0.67	3.11	−0.46	4.01	+0.64	.....	.....	7.77	+3.79	7.47	+2.51	8.11	+3.69	2.04	−1.77	1.07	−2.56	1.97	−1.16	1.55	−2.16	.....	.....
Phillipsburg	2.16	−1.44	2.17	−1.60	1.70	−1.84	.....	.....	1.26	−2.60	.....	.....	6.55	+1.70	10.59	+5.97	2.24	−1.42	0.74	−2.82	2.01	−1.19	0.91	−2.83	.....	.....
Sussex	2.65	−0.83	3.52	+0.02	2.76	−0.83	4.98	+1.54	2.04	−1.68	8.02	+4.34	.....	.....	7.29	+3.03	1.90	−2.00	0.80	−2.64	2.51	−0.74	1.13	−2.43	.....	.....
The Red Sandstone Plain.																										
Bayonne	.....	.....	.....	.....	.....	.....	.....	.....	2.59	−1.37	6.37	+2.59	7.47	+2.86	5.34	+0.28	3.71	+0.18	.....	.....	.....	.....	.....	.....	.....	.....
Boonton	2.33	−1.50	4.48	+0.37	2.61	−1.33	5.17	+1.18	1.48	−2.58	7.42	+3.75	8.24	+3.34	10.08	+5.00	3.43	−0.70	0.76	−3.15	1.20	−2.37	1.10	−2.88	48.30	−0.87
Chatham	3.97	+0.28	5.63	+2.08	3.82	+0.08	5.57	+1.47	2.00	−1.50	4.86	+0.80	8.53	+4.09	8.47	+4.06	5.09	+0.80	1.36	−2.85	1.53	−1.37	2.30	−1.87	53.13	+6.07
Elizabeth	2.55	−1.49	4.33	+0.01	2.82	−1.40	4.71	+1.03	1.75	−2.07	6.11	+2.49	8.79	+3.63	6.32	+2.03	4.45	+0.68	1.50	−2.39	1.94	−1.31	4.63	+0.67	49.90	+1.88
Flemington	2.58	−1.11	5.01	+1.34	2.77	−1.12	5.69	+2.17	3.22	−0.80	6.55	+2.71	6.36	+1.14	5.80	+1.09	3.47	−0.43	1.45	−2.21	1.52	−1.60	1.23	−2.53	45.65	−1.35
Highwood	2.92	−1.03	4.91	+0.50	2.78	−1.40	5.06	+1.63	2.46	−1.37	8.56	+4.87	9.10	+4.15	5.95	+1.20	3.33	−0.59	1.11	−3.31	1.82	−1.68	1.62	−2.59	49.62	+0.38
Jersey City	1.57	−1.93	4.61	+0.76	2.65	−1.50	4.76	+0.60	2.05	−1.53	6.24	+2.74	7.78	+3.34	4.26	−0.27	3.53	+0.18	1.34	−2.34	2.05	−1.14	0.87	−3.06	41.71	−4.15
Lambertville	2.84	−0.81	5.38	+1.78	2.96	−1.07	5.89	+2.31	2.76	−1.26	7.50	+3.59	6.69	+1.87	5.52	+0.86	4.18	+0.29	1.70	−1.78	1.99	−1.22	1.27	−2.60	48.68	+1.96
Little Falls	2.50	−1.20	5.16	+1.57	3.47	−0.12	5.72	+1.60	1.62	−2.17	6.58	+3.06	10.08	+5.69	7.10	+2.70	4.63	+1.05	0.91	−3.60	1.20	−1.70	2.09	−2.00	51.06	+4.88
New Brunswick	1.54	−2.25	4.64	+0.89	1.72	−2.09	4.32	+0.58	1.91	−1.98	7.18	+3.42	8.66	+3.62	5.87	+0.72	4.46	+0.86	2.02	−1.56	1.56	−1.92	1.64	−2.03	45.52	−1.74
New Milford	2.19	.....	4.15	.....	2.71	.....	3.82	.....	1.96	.....	7.76	.....	8.67	.....	.....	.....	2.77	.....	0.89	.....	2.01	.....	0.69	.....	.....	.....
Paterson	2.38	−1.47	4.93	+0.57	3.38	−1.00	5.06	+1.50	1.70	−2.74	7.71	+3.59	7.91	+2.89	8.04	+3.31	4.07	−0.06	0.83	−3.26	1.96	−1.21	1.43	−2.63	49.40	−0.51
Plainfield	2.30	−1.72	5.11	+1.01	2.94	−1.33	4.67	+0.77	1.33	−2.59	8.69	+4.95	9.72	+3.89	5.58	+0.37	4.47	+0.10	1.61	−2.54	2.11	−1.26	1.00	−3.06	49.53	−1.41
Ridgefield	2.25	.....	.....	.....	2.81	...	4.77	.....	1.93	.....	7.14	.....	7.64	.....	5.11	.....	3.16	.....	1.24	.....	2.16	.....	1.16	.....	.....	.....
Somerville	2.28	−1.44	4.69	+0.78	2.31	−1.65	5.13	+1.64	2.27	−1.58	7.29	+3.55	4.50	−0.61	4.53	−0.31	3.42	−0.23	1.69	−1.75	1.23	−1.81	1.40	−2.45	40.74	−5.86
South Orange	.....	.....	.....	.....	2.27	−1.59	4.94	+1.37	1.94	−1.62	7.45	+3.90	.....	.....	7.94	+2.86	5.03	+1.22	1.29	−2.55	1.96	−1.34	1.20	−2.72	.....	.....
Verona	2.38	.....	5.32	.....	3.37	.....	5.38	.....	1.80	.....	4.84	.....	9.05	.....	7.64	.....	4.38	.....	0.84	.....	2.26	.....	0.90	.....	48.16	.....
Woodcliffe Lake	2.48	.....	.....	.....	3.47	.....	4.53	.....	2.28	.....	7.26	.....	8.39	.....	.....	.....	3.20	.....	0.69	.....	2.47	.....	1.10	.....	.....	.....
New York, N. Y.	1.41	−2.25	4.35	+0.53	2.54	−1.10	4.71	+1.48	1.98	−1.26	6.12	+2.79	7.72	+3.48	4.26	−0.07	3.36	−0.03	1.27	−2.26	2.16	−0.80	0.85	−2.77	40.73	−2.26
The Southern Interior.																										
Belleplain	1.68	−1.85	2.44	−1.28	.....	.....	5.37	+1.72	3.37	−0.45	3.57	+0.35	3.30	−0.81	6.89	+2.59	6.94	+3.55	1.25	−2.17	1.38	−1.23	2.24	−1.71	.....	.....
Bridgeton	1.47	−2.05	2.63	−1.33	2.80	−1.38	4.79	+1.27	2.93	−0.91	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington	2.52	−0.88	3.79	+0.17	2.51	−1.20	5.39	+1.69	2.16	−2.05	6.91	+3.03	6.38	+1.64	5.08	−0.42	3.69	+0.18	1.12	−2.53	2.30	−0.81	1.58	−2.74	43.38	−3.92
Clayton	2.05	−1.42	3.65	−0.06	3.36	−0.22	5.80	+2.32	2.34	−0.99	6.77	+3.10	5.37	+0.52	6.91	+1.99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hightstown	1.97	−1.30	4.48	+0.75	2.91	−1.13	5.72	+1.81	2.58	−1.37	7.54	+3.94	9.46	+4.47	4.67	+0.09	4.91	+1.78	2.58	−1.13	1.55	−1.76	1.46	−2.23	49.83	+3.92
Imlaystown	1.74	−1.80	3.80	+0.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian Mills	3.78	−0.04	4.09	+0.52	3.05	−0.98	5.52	+2.09	2.98	−0.26	6.74	+2.61	4.89	+0.23	7.80	+1.87	5.96	+2.05	1.06	−2.38	2.76	−0.32	2.68	−1.72	51.31	+3.67
Lakewood	2.04	−1.64	4.37	+0.67	3.19	−0.79	5.87	+2.20	2.75	−0.65	5.75	+2.04	7.02	+2.17	7.09	+1.04	6.47	+3.68	0.73	−2.86	1.92	−0.54	1.87	−2.77	49.07	+2.55
Moorestown	1.94	−1.52	3.77	+0.17	2.45	−1.31	5.78	+2.49	2.39	−1.63	7.99	+4.27	2.21	−2.47	5.19	+0.30	4.61	+0.98	1.61	−1.96	1.90	−1.35	2.00	−1.69	41.84	−3.72
Moorestown No. 2	.....	.....	.....	.....	.....	.....	.....	.....	2.32	.....	7.73	.....	2.58	.....	4.94	.....	4.49	.....	1.84	.....	1.52	.....	2.22	.....	.....	.....
Northfield	1.95	−1.58	2.87	−0.02	2.45	−1.04	6.22	+2.76	2.85	−0.62	3.64	−0.03	3.34	−0.26	7.26	+2.91	7.67	+5.17	1.14	−1.64	1.35	−1.03	2.34	−1.78	43.08	+2.84
Pleasantville	2.52	−0.64	2.91	0.00	2.87	−0.60	6.87	+3.52	2.94	−0.32	3.60	−0.33	3.97	−0.01	6.18	+1.25	8.46	+5.34	1.45	−1.99	1.25	−1.47	3.02	−1.22	46.04	+3.53
Riverton	2.12	.....	3.87	.....	2.56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Runyon	1.90	.....	4.20	.....	2.82	.....	5.85	.....	2.22	.....	6.89	.....	9.37	.....	6.17	.....	4.34	.....	1.84	.....	1.69	.....	1.52	.....	48.81	.....
Trenton	1.74	−1.43	4.09	+0.78	2.19	−1.85	4.67	+1.38	2.45	−1.07	5.90	+2.41	7.17	+2.40	3.40	−1.97	3.42	−0.17	1.58	−1.83	1.91	−1.52	1.19	−1.97	39.71	−4.84
Tuckerton	1.85	−1.78	3.22	−0.57	2.46	−1.79	7.16	+3.42	2.02	−1.72	3.33	−0.50	2.81	−1.07	5.77	+0.23	9.62	+6.56	1.60	−1.93	1.71	−1.37	1.96	−2.55	43.51	−3.07
Vineland	1.78	−2.24	2.66	−1.19	2.86	−1.10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia, Pa.	1.91	−1.39	4.00	+0.57	2.10	−1.29	5.55	+2.50	2.19	−1.07	6.77	+3.53	3.60	−0.55	5.47	+0.85	3.61	+0.47	0.73	−2.08	1.94	−0.76	1.50	−1.93	39.37	−1.15
The Sea Coast.																										
Asbury Park	2.17	−1.40	4.17	+0.55	2.61	−1.62	5.55	+1.86	2.25	−1.33	6.98	+3.36	5.36	+0.82	3.33	−1.73	4.66	+1.67	0.24	−3.47	1.80	−1.12	1.94	−1.91	41.06	−4.32
Atlantic City	2.23	−1.26	2.72	−0.76	2.48	−1.12	6.87	+3.88	3.49	+0.44	3.03	−0.01	3.40	−0.53	6.20	+1.71	9.16	+6.51	1.38	−1.82	1.87	−0.95	2.03	−1.91	44.86	+4.18
Cape May City	2.10	−1.27	.....	.....	2.22	−1.51	4.17	+1.18	1.35	−1.64	3.95	+0.91	4.99	+1.21	5.46	+1.20	6.72	+3.72	1.11	−2.19	1.39	−1.83	2.25	−1.53	.....	.....
Long Branch	1.42	−2.76	3.85	−0.20	3.08	−1.26	5.56	+1.01	2.71	−1.05	8.34	+4.54	6.60	+1.68	4.68	+1.45	5.99	+2.93	0.60	−3.45	2.09	−1.43	1.43	−3.31	46.35	−4.75
Sandy Hook	1.37	−2.48	4.71	+1.04	2.44	−1.80	4.26	+0.30	1.91	−1.79	6.37	+2.41	8.42	+3.63	6.31	+1.77	4.08	+0.58	1.22	−2.56	1.89	−1.36	1.07	−2.97	44.05	−3.23

Monthly and Annual Mean Temperatures for the Year 1928, with Departures from the Normal

Stations.	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	30.8	+3.5	29.7	+2.6	37.8	−0.3	^{a}47.6	−2.2	59.4	−1.3	67.2	−1.6	75.6	+2.4	74.8	+3.8	^{a}62.4	−2.3	56.2	+2.4	43.8	+2.7	35.3	+4.7	51.7	+1.2
Charlotteburg	^{b}29.8	+2.9	29.0	+3.4	35.8	0.0	^{b}46.0	−0.8	56.0	−1.5	^{a}64.6	−0.2	72.2	+2.2	72.2	+4.3	60.8	−1.1	^{b}54.0	+2.4	42.6	+2.5	34.6	+4.8	49.8	+1.6
Dover	^{b}30.2	+3.6	^{b}29.4	+3.2	35.2	0.0	^{b}45.8	−1.6	57.2	−1.4	^{b}64.4	−2.3	73.4	+2.0	^{a}72.2	+3.1	59.7	−2.5	53.5	+2.2	43.3	+3.2	^{a}34.6	+4.7	49.9	+1.2
Layton	28.9	+4.2	28.0	+4.4	34.4	−1.2	^{a}44.8	−2.4	56.1	−1.9	63.9	−1.6	72.2	+1.3	71.8	+3.4	59.8	−2.5	53.1	+1.6	41.5	+2.7	32.7	+5.3	48.9	+1.1
Newton	30.2	+4.5	28.8	+2.3	35.3	−0.2	46.6	−1.2	^{b}58.0	−1.5	65.2	−2.8	72.7	+0.2	73.3	+2.9	^{b}61.8	−1.7	54.6	+1.9	43.1	+2.6	35.2	+5.1	50.4	+1.0
Phillipsburg	.....	.....	^{d}30.8	+2.9	37.6	−0.5	47.5	−2.4	59.0	−2.3	66.6	−2.7	74.3	+0.2	73.9	+2.1	62.4	−2.8	55.4	+1.5	43.9	+2.7	35.2	+3.9	.....	.....
Sussex	^{a}31.2	+4.6	^{b}29.2	+3.8	35.6	−0.7	45.7	−2.9	^{a}56.8	−3.1	^{i}64.0	−2.8	^{c}73.2	+1.1	^{c}72.6	+3.1	^{b}61.2	−3.0	^{c}54.2	+1.0	^{a}42.4	+1.3	33.9	+4.0	50.0	+0.5
The Red Sandstone Plain.																										
Bayonne	.....	.....	.....	.....	^{j}37.4	−2.1	^{g}46.8	−2.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boonton	30.6	+3.3	28.8	+1.7	35.8	−0.8	45.4	−3.3	56.7	−2.5	64.8	−2.8	73.5	+1.0	72.5	+1.2	60.3	−3.3	53.0	+0.2	42.6	+1.2	34.2	+3.7	49.8	0.0
Elizabeth	^{c}32.3	+2.1	^{b}33.3	+2.8	^{b}40.4	+1.6	.....	.....	^{d}59.0	−3.0	^{b}67.9	−2.6	75.7	+0.4	76.1	+2.7	63.6	−3.1	^{f}58.8	+3.4	46.2	+2.7	^{c}38.8	+5.5	.....	.....
Flemington	32.2	+2.4	31.8	+3.0	39.4	−0.7	48.2	−2.2	58.5	−2.8	67.5	−1.7	75.2	+0.6	75.1	+2.6	62.8	−3.5	56.7	+0.7	45.1	+2.2	36.4	+4.4	52.4	+0.4
Highwood	31.6	+2.8	30.8	+2.4	37.6	+0.6	47.2	−1.3	^{b}56.4	−2.9	65.4	−2.2	72.6	+0.3	72.6	+1.8	61.2	−2.5	54.3	+0.9	43.3	+1.3	35.2	+3.4	50.7	+0.4
Jersey City	33.9	+1.7	33.2	+2.6	38.9	−0.3	48.6	−1.4	59.6	−2.0	68.0	−2.9	76.8	+0.7	76.0	+1.9	64.7	−2.5	58.0	+1.7	46.6	+2.6	39.2	+5.1	53.6	+0.6
Lambertville	31.2	+0.7	30.8	+0.4	37.2	−2.2	47.1	−3.6	58.2	−3.4	66.4	−3.3	^{b}74.4	+0.1	74.6	+2.2	61.6	−4.2	55.2	+0.6	44.1	+0.9	35.6	+2.0	51.4	−0.8
Little Falls	32.2	+4.2	30.6	+1.0	37.0	−1.0	47.0	−2.9	57.6	−2.1	66.3	−1.7	74.9	+1.1	74.0	+0.8	62.8	−1.3	55.8	+0.9	44.0	+1.8	35.0	+3.5	51.4	+0.4
New Brunswick	32.9	+2.7	32.2	+1.4	39.4	+0.6	49.0	−0.6	59.2	−1.2	68.0	−1.1	75.7	+1.7	75.3	+3.2	63.6	−2.0	57.4	+2.6	46.1	+2.7	37.2	+4.0	53.0	+1.2
Paterson	32.8	+3.2	32.6	+2.4	38.6	−0.2	48.1	−2.4	59.6	−1.9	67.8	−2.0	75.2	+0.8	74.6	+2.4	63.8	−2.4	57.7	+2.5	46.4	+2.9	38.4	+5.3	53.0	+0.9
Plainfield	32.4	+2.4	31.2	+2.5	37.2	−1.6	46.8	−2.8	57.2	−3.0	66.0	−2.6	74.9	+0.9	74.6	+2.8	62.4	−3.2	55.4	+1.2	44.3	+1.8	35.9	+3.2	51.5	+0.1
Ridgefield	30.6	.....	.....	.....	37.0	.....	46.6	.....	57.0	.....	66.1	.....	74.4	.....	74.6	.....	62.7	.....	56.0	.....	44.4	.....	35.8	.....	.....	.....
Somerville	31.7	+2.9	32.1	+3.2	^{b}37.8	−0.4	^{b}47.4	−2.1	^{a}57.8	−3.0	66.3	−2.8	74.4	+0.3	^{i}74.3	+1.9	61.8	−4.2	^{c}54.6	+0.3	44.6	+2.2	^{a}36.3	+4.1	51.6	+0.2
South Orange	.....	.....	^{a}31.8	+2.8	^{a}38.7	+1.6	^{a}47.6	−0.9	58.9	−1.1	^{b}67.2	−1.3	^{d}75.1	+1.9	74.8	+3.9	63.2	−0.9	56.2	+2.8	^{m}45.0	+3.2	^{k}37.1	+5.0	.....	.....
Verona	31.2	.....	30.4	.....	36.3	.....	46.3	.....	57.1	.....	64.8	.....	72.6	.....	72.3	.....	60.4	.....	54.4	.....	43.6	.....	35.5	.....	50.4	.....
New York, N. Y.	33.8	+2.9	32.9	+1.6	38.3	+0.6	47.5	−1.9	58.4	−2.2	66.6	−2.2	75.0	+1.2	74.4	+1.3	63.8	−3.0	57.8	+1.5	46.6	+2.4	39.4	+4.4	52.9	+0.6
The Southern Interior.																										
Belleplain	.....	.....	^{a}34.0	+2.5	^{j}39.8	−1.3	47.4	−3.2	^{i}58.3	−2.8	67.6	−1.1	73.8	0.0	^{a}75.2	+2.6	^{a}61.8	−4.7	55.4	−0.9	.....	.....	.....	.....	.....	.....
Bridgeton	34.4	+0.7	34.8	+1.1	41.2	−1.1	48.6	−4.1	59.2	−4.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington	34.2	+1.9	34.1	+2.8	40.8	+0.4	49.8	−2.0	60.8	−1.1	68.7	−1.0	76.0	+1.0	77.0	+2.8	63.8	−3.0	57.9	−0.3	46.6	+2.2	37.0	+3.2	53.9	+0.6
Clayton	34.4	+2.3	^{a}33.8	+3.1	40.2	−1.5	48.8	−2.4	59.8	−1.9	^{b}68.4	−1.1	75.4	+0.4	^{d}76.4	+3.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hightstown	32.3	+2.4	32.6	+3.2	39.0	−1.4	^{b}47.9	−2.6	^{a}58.2	−3.1	67.8	−1.2	74.9	+0.5	75.8	+3.5	63.3	−3.5	56.8	+1.6	45.6	+2.3	36.0	+3.4	52.5	+0.4
Imlaystown	^{c}32.0	+0.9	^{b}32.5	+2.1	^{k}37.6	−1.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian Mills	33.8	+1.9	34.0	+2.2	40.0	−0.5	48.6	−1.7	59.4	−2.7	68.8	−1.0	75.4	+0.7	76.2	+3.6	63.0	−3.1	^{g}55.8	+0.3	47.1	+4.2	36.6	+2.8	53.2	+0.6
Lakewood	32.8	+1.5	32.6	+2.9	38.6	−1.0	47.8	−1.6	57.6	−2.6	67.0	−0.5	74.0	+1.2	74.4	+3.3	61.6	−3.0	55.2	+0.1	45.3	+2.5	35.6	+2.1	51.9	+0.4
Moorestown	33.8	+3.1	33.6	+2.3	39.8	+0.6	48.1	−2.3	^{b}59.9	−1.4	^{a}68.3	−1.7	74.7	0.0	75.6	+3.0	63.6	−2.4	58.4	+3.7	47.0	+3.8	37.6	+4.1	53.4	+1.1
Moorestown No. 2	.....	.....	.....	.....	.....	.....	.....	.....	59.6	.....	68.2	.....	75.0	.....	75.6	.....	63.1	.....	56.8	.....	45.6	.....	36.2	.....	.....	.....
Pleasantville	33.8	.....	^{b}33.4	.....	38.4	.....	46.4	.....	56.0	.....	^{a}66.1	.....	72.6	.....	^{b}75.4	.....	62.4	.....	56.0	.....	^{a}45.4	.....	^{a}35.2	.....	51.8	.....
Riverton	32.4	.....	32.8	.....	39.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Runyon	31.2	.....	31.5	.....	37.0	.....	^{d}47.3	.....	56.5	.....	.....	.....	73.8	.....	74.0	.....	61.3	.....	54.4	.....	^{c}43.9	.....	35.2	.....	.....	.....
Trenton	33.6	+3.1	32.5	+1.8	39.0	−0.1	48.2	−1.6	59.8	−1.3	67.8	−1.7	75.4	+0.9	75.5	+2.5	63.3	−3.6	57.4	+1.8	46.6	+2.2	38.2	+3.8	53.1	+0.6
Tuckerton	^{b}35.2	+2.6	31.2	+3.4	39.8	−0.2	47.8	−1.5	57.1	−2.8	67.3	−1.1	73.5	−0.6	75.6	+2.9	64.1	−2.1	57.6	+1.5	47.2	+3.1	37.3	+2.9	53.1	+0.7
Vineland	35.2	+3.0	35.8	+3.3	42.1	+1.6	^{e}50.6	−0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia, Pa.	35.6	+3.0	35.1	+1.2	42.0	+1.2	50.6	−1.5	62.4	−0.5	69.8	−1.6	77.4	+1.2	77.2	+2.4	65.4	−2.6	59.9	+2.1	49.0	+3.3	40.8	+4.5	55.4	+1.0
The Sea Coast.																										
Asbury Park	^{b}34.7	+2.5	33.4	+2.0	^{a}38.3	−0.7	46.6	−1.9	^{b}56.4	−2.4	^{a}65.6	−1.8	74.1	+1.7	75.4	+3.6	^{g}64.2	−2.6	^{b}59.4	+3.6	48.2	+3.4	39.6	+4.6	53.0	+1.0
Atlantic City	35.6	+3.1	35.8	+2.2	40.0	+1.4	47.6	−0.2	56.4	−1.7	66.0	−0.6	72.1	0.0	74.7	+2.2	65.6	−1.2	59.0	+2.1	48.2	+2.6	39.4	+3.0	53.4	+1.1
Cape May City	35.4	+1.3	35.8	+1.7	40.9	+0.1	49.2	+0.8	58.0	−0.6	68.0	+0.3	73.1	−0.3	74.8	+1.4	65.0	−4.0	58.6	−1.0	48.8	+1.4	38.3	+0.3	53.8	+0.1
Long Branch	31.6	0.0	30.6	+0.2	37.1	−1.4	45.7	−2.4	54.8	−3.4	63.8	−2.4	72.8	+0.7	72.8	+1.8	61.2	−4.7	54.6	−1.7	44.4	+0.2	34.8	+0.7	50.4	−1.0
Sandy Hook	33.4	+2.6	32.6	+2.0	38.3	+1.3	47.1	+0.1	57.2	−1.3	66.6	−1.2	74.9	+1.2	74.6	+1.8	64.6	−2.5	58.2	+1.2	46.7	+2.1	38.8	+4.4	52.8	+1.0

Reference letters, as a, b, c., in table indicate number of days missing; for example, b represents 2 days.

THE WEATHER BY MONTHS.

January was well above normal in temperature and warmest of the last seven Januaries. There were two cold waves. Precipitation was decidedly below normal, although depth of snowfall was a little more than average. February was warmer than normal, with precipitation also above normal but snowfall light. Three cold waves occurred in February, but they were not severe. Mean temperature dropped to below normal for March, continuing so through June. March precipitation was more than an inch below normal, while April was about an inch and two-thirds above. Development of vegetation was retarded in the spring by coolness, inadequacy of sunshine, and at times by wetness, and there was a good deal of damage by frost. The rains of May were much below normal; light frost occurred in central and southern districts in that month as late as the 25th. June was the first month of the year with no freezing weather. The June rains were nearly three inches above normal, and have been surpassed in amount in only two years in the long record. July and August were above normal in temperature and also, in a statewide consideration, in precipitation. Absence of reports of serious damage except to a few farms indicates that the hail storms of the summer were not of great consequence. September was cool, with 90° the highest recorded temperature, and with precipitation well above normal. High winds occurred on the 19th and 20th, damaging many crops and trees. October, November, and December were each above normal in temperature and below in precipitation, with little snow. Killing frosts were recorded in October in nearly all parts of the State. December passed without a cold wave.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. JANUARY, 1929. No. 1

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Particularly notable features are absent in New Jersey's weather for the month. There is nothing to which special attention need be directed except the light average snowfall, yet three years since 1912 have had lower average snowfalls. From 1912 back no January in the period covered by records had so little. The heaviest totals were in the extreme northern part of the State, with the maximum, 8.9 inches, at Culvers Lake, Sussex County. The southern half of the State ranged from a trace to an inch. Like October, November, and December, January was above normal in mean temperature. The average excess, however, was less than a degree. Only one cold wave occurred. Falling temperatures the afternoon and night of the 13th preceded the lowest minimum temperatures of the month, registered the next morning. Of this cold wave due warning was given. A cold wave warning issued on the 7th failed of technical verification, although at many stations lower minima than those of the 8th occurred only in the above cold wave.

The average precipitation was slightly under the normal amount. It was well distributed through the month up to, and including the 25th.

The month was not without gales of limited extent, and a strong wind movement was general, but no damage except of a minor character, such as breaking windows or blowing down signs, was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 30.7°, which was 0.9° above normal. The highest temperature was 67° at Hightstown on the 19th, and the lowest, 4° below zero, at Culvers Lake on the 14th. The greatest daily range of temperature was 51° at Boonton on the 5th. The highest monthly mean temperature was 35.1° at Cape May City, and the lowest, 25.9° at Layton.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +1.4°; Red Sandstone Plain, +0.8°; Southern Interior, +0.8°; Sea Coast, +0.6°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 3.49 inches, which was 0.13 inch below normal. The average total snowfall at 18 selected stations was 1.6 inches. The greatest monthly precipitation was 5.03 inches, at Charlotteburg, and the least, 1.92 inches at Cape May City. The greatest amount of precipitation in any 24 consecutive hours was 2.33 inches at Charlotteburg on the 5-6th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, which was normal.

The precipitation accumulated departure from the normal for the year 1929, to date, by sections, is: The Highlands, +0.13 inch; Red Sandstone Plain, —0.29 inch; Southern Interior, +0.02 inch; Sea Coast, —0.42 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 14 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 66 miles per hour from the south at Atlantic City on the 6th. High winds occurred on the following dates: 5, 6, 7, 10, 13, 18, 19, 20, 23, 29, 30.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 13, which was 2 more than normal; partly cloudy, 7, or 2 less than normal; cloudy, 11, which was normal. The per cent of possible sunshine was 54, which was 4 per cent above normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 30.06 inches, which was 0.05 inch below normal. The highest reading was 30.70 inches on the 5th at Ridgefield and Sandy Hook, and the lowest 29.22 inches on the 6th at Verona. The pressure extremes occurred on successive days at most of the stations reporting. The highest was reached during the night of the 4-5th, thence the pressure began to fall steadily until the lowest was recorded during the middle of the day of the 6th.

The mean stage of the Delaware River at Phillipsburg was 2.5 feet, and the highest reading was 3.4 feet on the 11th and 12th. At Trenton the River was frozen around the gage on sixteen days, therefore the mean stage could not be determined.

Dense fog occurred on the 1st, 7th, 17th and 18th at most of the stations. A thunderstorm was reported by three stations on the 6th. Light hail occurred at a number of stations on the 6th, 10th, 15th, 23d, or 25th. The hail stones were very small and of little consequence. Sleet was reported on one or more of the following dates: 1, 14, 15, 17, 22, 23, 24, 25. An aurora was observed on the 8th at Layton, Trenton and Sandy Hook. Parhelia were observed on the 14th at Indian Mills and on the 24th at Trenton.

COMPARATIVE DATA FOR JANUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	30.8	67	0	4.08	5.41	3.33	......	......	......	......	......
1886	27.3	60	−10	4.47	5.59	3.08	......	......	......	......	......
1887	28.4	67	−6	3.86	6.65	2.00	......	......	......	12	10
1888	25.4	59	−12	4.77	6.74	2.80	......	......	......	12	9
1889	36.2	60	8	5.68	8.78	3.84	......	......	......	9	9
1890	41.3	78	12	2.29	3.22	1.05	......	......	......	11	10
1891	34.2	59	10	6.57	10.55	4.41	......	10	11	10	10
1892	29.9	67	−6	5.13	7.05	2.50	......	10	9	12	10
1893	21.6	*54*	−21	3.04	4.56	1.87	......	10	10	11	9
1894	34.2	61	−4	2.34	3.80	1.18	......	10	8	13	11
1895	28.1	64	−4	4.66	5.80	2.48	9.7	10	10	11	11
1896	28.6	61	−7	1.66	*2.81*	*0.68*	......	12	10	9	5
1897	29.0	64	−6	2.80	4.21	1.70	11.5	11	8	12	9
1898	32.6	64	−10	4.20	5.90	2.79	9.7	9	11	11	11
1899	30.1	60	−21	4.01	5.73	2.40	6.0	13	8	10	11
1900	32.4	64	−5	3.85	5.50	2.37	2.6	11	11	9	10
1901	30.4	63	−6	2.52	4.00	1.35	5.4	11	11	9	9
1902	28.4	58	−5	3.28	4.35	2.52	8.6	12	9	10	10
1903	30.4	57	−5	3.90	5.04	2.31	6.4	10	10	11	10
1904	23.3	58	*−34*	3.09	4.67	1.34	15.6	13	7	11	10
1905	27.0	60	−16	4.18	7.13	2.68	21.3	12	9	10	9
1906	36.5	74	−5	2.85	3.86	2.08	3.1	11	9	11	11
1907	31.8	71	−19	3.50	5.80	1.93	10.3	8	9	14	14
1908	31.8	60	−6	3.74	5.22	2.29	9.9	12	11	8	9
1909	33.2	69	−12	3.18	4.13	2.18	7.5	8	9	14	12
1910	29.7	*54*	−15	5.04	6.65	3.66	13.3	8	8	15	15
1911	33.5	63	0	3.44	5.34	1.97	3.6	10	7	14	14
1912	22.3	58	−32	2.82	4.62	1.73	13.4	8	12	11	13
1913	35.9	68	10	3.58	4.71	2.63	*0.8*	11	7	13	14
1914	31.9	73	−12	3.85	6.15	1.95	2.4	9	8	14	9
1915	33.5	61	3	6.55	8.92	4.40	3.4	11	6	14	12
1916	35.1	74	−2	*1.50*	2.96	0.92	1.9	11	8	12	11
1917	31.4	58	0	3.26	4.52	2.35	5.4	10	8	13	13
1918	*20.3*	56	−16	4.14	6.14	2.78	18.9	12	8	11	11
1919	34.1	62	−7	3.51	4.44	2.24	1.3	14	7	10	8
1920	23.6	53	−10	2.60	3.53	1.61	6.6	11	7	13	11
1921	33.0	63	−5	2.63	3.49	1.78	2.7	13	8	10	9
1922	27.6	57	−11	2.62	4.13	1.08	11.1	15	6	10	8
1923	30.1	66	−14	5.22	7.26	3.41	16.6	9	7	15	12
1924	32.2	65	−6	4.48	5.69	2.88	1.4	15	8	8	8
1925	27.4	59	−20	4.43	8.73	2.54	22.8	12	6	13	10
1926	30.8	63	−9	2.61	4.04	1.63	2.4	11	8	12	9
1927	29.2	70	−12	2.22	3.32	1.19	7.9	11	7	13	11
1928	32.5	65	−15	2.26	3.97	1.37	8.3	15	8	8	8
1929	30.7	67	−4	3.49	5.03	1.92	1.6	13	7	11	10

W. B. O. Philadelphia-2-27-29 830.

Climatological Data for January, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	28.8	+1.5	59	6	5	14	28	4.65	+1.11	1.12	2.5	9	14	6	11	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	28.2	+1.3	61	19	0	16	33	5.03	+1.48	2.33	6.8	12	1	13	17	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	−4	14	....	3.10	−0.08	0.77	8.9	10	13	6	12	nw.	Brice E. Riker.
Dover	Morris	600	45	28.3[a]	+1.7	61[a]	19	2	14	35[a]	4.50	+0.11	1.69	5.5	10	9	16	6	......	William C. Harris
Layton	Sussex	480	28	25.9	+1.2	60	19	1	14	33	2.62	−0.27	0.68	6.0	6	7	9	15	w.	A. M. Depue.
Newton	Sussex	769	45	27.6	+1.9	62	19	−1	14	33	3.07	−0.54	0.82	7.6	8	11	3	17	nw.	Irving J. Kern.
Phillipsburg	Warren	363	46	29.8	+1.7	61	19	7	14	31	3.42	−0.18	1.08	1.0	8	15	9	7	......	Town Engineer.
Sussex	Sussex	442	34	27.2[a]	+0.6	60[a]	19	2[a]	14	32[a]	2.87	−0.61	1.15	5.0	8	16	5	10	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	28.0	+1.4	62	19	−4	14	35	3.66	+0.13	2.33	5.4	9	11	8	12	nw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	31.9[a]	+1.2	64[a]	19	7	14	24[a]	2.88	−1.01	1.05	0.8	8	21	3	7	w.	William Mann.
Boonton	Morris	400	§39	28.8	+1.5	63	6†	4	14	51	3.76	−0.07	1.31	......	10	15	2	14	sw.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	4.43	+0.74	1.35	0.4	12	16	7	8	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	31.3[b]	+1.1	63[b]	19	6	14	30[b]	3.25	−0.79	1.09	0.5	9	20	7	4	nw.	Union County Park Com.
Flemington	Hunterdon	140	§43	30.5	+0.7	62	19	5	14	27	3.58	−0.11	1.01	2.0	10	17	7	7	w.	Hiram E. Deats.
Highwood‡‡	Bergen	90	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Jersey City	Hudson	10	31	32.1	−0.1	62	6†	7	14	32	3.01	−0.49	0.77	2.1	12	9	12	10	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	**430	42	29.0	−1.5	60	19	4	14	30	3.91	+0.26	1.84	0.5	9	16	6	9	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	30.3	+2.3	64	19	5	14	49	4.06	+0.36	1.63	1.4	12	14	8	9	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	31.4	+1.2	63	6†	5	14	30	2.78	−1.01	0.73	0.5	9	11	13	7	w.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	......	......	......	......	....	2.63	....	1.09	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	32.2	+2.6	64	19	7	14	26	4.12	+0.27	1.40	5.0	11	16	3	12	sw.	Marion T. Probert.
Plainfield	Union	120	41	30.4	+0.4	62	6†	5	14	32	3.22	−0.80	1.01	2.5	11	10	12	9	nw.	E. D. Pearson.
Ridgefield	Bergen	80	12	29.6	......	62	19	6	14	35	3.46	....	1.20	1.8	11	10	10	11	nw.	George P. Kirsten.
Somerville	Somerset	70	46	30.1[a]	+1.3	63[a]	19	5[a]	14	30[a]	3.41	−0.31	1.12	1.8	10	14	8	9	w.	Arthur Gerlich.
South Orange	Essex	200	57	30.3	−1.4	61	6†	5	14	31	3.26	−0.77	0.92	0.5	9	9	9	13	w.	Everett W. Bird.
Verona	Essex	490	3	28.5	......	62	19	5	14	35	4.16	....	1.60	2.7	13	11	9	11	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	3.84	....	1.29	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	32.1	+1.2	62	19	7	14	33	2.67	−0.99	0.61	1.9	11	8	11	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	30.5	+0.8	64	19	4	14	51	3.52	−0.29	1.84	1.6	10	14	8	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	32.6[i]	−0.4	63[i]	19	5[h]	14	35[i]	2.96	−0.57	1.17	T.	4	....	....	....	......	Thomas J. Durell.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	32.8	+0.5	64	19	8	14	25	3.12	−0.28	0.85	0.4	10	13	4	14	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	31.0	+1.1	67	19	6	14	30	2.95	−0.32	0.88	T.	6	12	9	10	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	32.7	+0.8	63	19	6	14	33	4.19	+0.37	1.36	1.0	9	10	8	13	nw.	James M. Armstrong.
Lakewood	Ocean	54	25	32.1	+0.8	60	6†	7	14	28	4.25	+0.57	1.58	T.	8	12	8	11	w.	R. W. Holman.
Moorestown	Burlington	75	66	32.1[a]	+1.4	63[a]	19	8[a]	14	30[a]	2.92	−0.54	0.84	T.	8	15	5	11	nw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	30.5	......	62	19	6	14	34	2.81	....	0.63	T.	10	14	4	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	3.61	+0.08	1.17	0.1	9	....	....	....	....	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	31.5[a]	......	66[a]	19	4[a]	14	36[b]	3.97	+0.81	1.20	......	12	15	6	10	nw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	30.2	......	64	19	5	14†	35	3.74	....	1.02	.....	9	18	9	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	31.7	+1.2	63	19	7	14	35	3.06	−0.25	0.99	0.8	10	10	9	12	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	3.14	....	0.95	1.0	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	33.7	+1.1	65	19	5	14	35	3.99	+0.36	1.30	T.	10	16	1	14	nw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa.	......	117	58	34.2	+1.6	63	19	9	14	34	2 70	−0.60	0.87	0.5	9	8	9	14	nw.	U. S. Weather Bureau.
Means and extremes	......	......	..	31.9	+0.8	67	19	4	14	36	3.44	+0.02	1.58	0.3	9	14	6	11	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	33.0	+0.8	60	19	7	14	27	3.06	−0.51	0.83	0.5	10	21	6	4	nw	Information Bureau.
Atlantic City	Atlantic	16	56	34.8	+2.3	64	19	8	14	27	3.02	−0.47	0.87	0.1	10	11	8	12	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	35.1	+1.0	62	19	12	14	28	1.92	−1.45	0.62	0.2	10	10	8	13	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	29.5	−2.1	62	6†	5	14	35	4.67	+0.49	1.63	1.7	12	11	7	13	nw.	William D. Martin.
Sandy Hook	Monmouth	22	31	31.7	+0.9	60	19	9	14	28	3.80	−0.16	1.26	1.2	10	8	10	13	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	32.8	+0.6	64	19	5	14	35	3.29	−0.42	1.63	0.7	10	12	8	11	nw.	
For the State	......	......	....	30.7	+0.9	67	19	−4	14	51	3.49	−0.13	2.33	1.6	10	13	7	11	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means. ** Elevation corrected to 430 feet from 370 feet.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville; * Formerly called Bergen Point; Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for January, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.95				T.	1.12				.72			T.		.03		.70	.05	.13				.20	.75								4.65
Charlotteburg	Passaic	.86	.05				2.33	T.			.58		T.	.04		.05		.10	.04	.12				.17		.69							5.03
Culvers Lake	Delaware	.61	.13				.75	T.			.65			.01		.01		.15	.01							.77	.01						3.10
Dover	Passaic	.95				*	1.69	T.		T.	.70			.10		.05		.16		.02			.10			.73				T.			4.50
Layton	Delaware	.67	T.				.68				.38			T.				.15						.11		.63							2.62
Newton	Delaware	.82	.09				.75	T.			.52			T.		.02		.10						.17		.60							3.07
Phillipsburg	...do	1.08	T.			.24	.48	T.			.74			T.		T.		T.		.14			.09	.11		.54						T.	3.42
Sussex	Hudson	.56					1.15				.49			.05				.11	.17					.17		.17							2.87
The Red Sandstone Plain.																																	
Bayonne	Coast					.80	.25				.60							.20		.05			.06			.90						.02	2.83
Boonton ‖	Passaic	.05	.80				1.31	.03			.73		T.		T.	.02		T.	.06					.18		.16	.42						3.76
Chatham ‖	...do	.12	.84	.04			1.35				.75	.09	T.	.02				.02	.16					.34		.21	.49						4.43
Elizabeth	Coast	.55	.10				1.09				.55			.02	T.			.21	.01					.29		.43							3.25
Flemington	Raritan	.67	.17			T.	1.01				.77		T.	T.				.08	.10					.23		.36	.19					T.	3.58
Highwood	Hackensack																																......
Jersey City	Coast	*	.60	T.			.77	T.			.47		T.	.03		.01		.27		T.				.25		.59						.02	3.01
Lambertville	Delaware	.02	.18			T.	1.84				.60		.02	.02		T.		.27						.29		.67						T.	3.91
Little Falls ‖	Passaic	.08	.68				1.55	.08	T.		.68	T.	T.		T.	.01		.05	.08	.01				.20		.22	.42						4.06
New Brunswick	Raritan	.42	.03				.73	T.			.46			T.		T.		.22	.02	T.				.24		.66							2.78
New Milford.**	Hackensack	.68				.42	.67				.04							.19						.20			.12	.18	.13				2.63
Paterson	Passaic	.65	.10			T.	1.40	T.			.66		.02	.02		.02		.11		.02			.20	.20		.72							4.12
Plainfield	Raritan	*	.61			.02	.99				.62		T.	.04				.17					*	.17		.59				T.	T.	.01	3.22
Ridgefield**	Hackensack	*	.72				1.20	T.			.62		T.	.04		.03		.15					T.	.21		.48						.01	3.46
Somerville	Raritan	.79				T.	1.12				.70			T.				.17	.01	.10				.22		.30							3.41
South Orange	Rahway	.62	.11			T.	.92				.63			.02		T.		.14						.22		.60							3.26
Verona**	Passaic	.72				.76	.84	T.			.64		.01	.05		.01		.18	.01	T.			.11	.12		.67						.04	4.16
Woodcliff Lake**	Hackensack	.78				.65	.64	1.03						.03		.07		.10						.10		.37						.07	3.84
New York, N. Y***	Coast	.58	T.			.24	.37	T.			.40		T.	.03		.01		.23	T.	T.			.13	.11		.55						.02	2.67
The Southern Interior.																																	
Belleplain	Tuckahoe					T.	1.04				.54			T.	T.			.21						T.		1.17							2.96
Bridgeton	Coast																																......
Burlington	Delaware	.45	.07			T.	.65				.47			.01		T.		.26	.02	.04		T.		.30		.85						T.	3.12
Clayton	Delaware																																......
Hightstown	Raritan	.44					.88				.41			T.		T.		.16		T.				.30		.76							2.95
Indian Mills	Mullica	.28				T.	1.36				.74			T.		.03		.55	.04	.06				.25		.88							4.19
Lakewood	Metedeconk	.25	.05			T	1.58				.49			T.		T.		.48	.02					.38		1.00							4.25
Moorestown	Delaware	.40	.02				.67				.48			T.		T.		.23		.05	T.			.23		.84							2.92
Moorestown No. 2	Delaware	.12	.28				.63				.42	T.			T.	T.		.01	.22	.05				.22		.24	.62						2.81
Northfield	Coast	.04					1.17				.66		.03	T.				.44		.03				.11		.12			.01				3.61
Pleasantville ‖	Coast	.04	.03				.67	.53			.76	.02	.07		T.			.04	.40	.09				.18		.27	.87		T.				3.97
Runyon	Coast	.58					1.02				.54			.02				.33		.07				.36		.82							3.74
Trenton***	Delaware	.49	T.			.54	.45	T.			.40		T.	.02		T.		.22	T.	.04		T.	.23	T.		.66		T.				.01	3.06
Trenton No. 2 ‖	Delaware	.11	.28	T.			.83	.12	T.		.45	T.	T.		.03	T.	T.	.22	.06				T.	.24		*	.77						3.14
Tuckerton	Coast	.12					1.30				.78		.03	T.				.42	.02	.08				.19		1.02	.03						3.99
Vineland	Maurice																																......
Phila., Pa***	Delaware	.36				.28	.31			T.	.52			.01		T.		.16	T.	.02			.17			.37						T.	2.70
The Sea Coast.																																	
Asbury Park	Coast	.20	.02				.83	T.			.57			.05		T.		.45		.06			.36			.52						T.	3.06
Atlantic City***	...do	.02				.26	.61				.68	T.	.08	T.		T.		.31	T.	.07			T.	.16	T.	.82			.01			T.	3.02
Cape May City	...do	T.	T.			.03	.59				.45		.06	T.		T.		.21	.01	.08			T.	.08		.39			.02				1.92
Long Branch	...do	.36	T.			.73	.90	T.			.46			.08		.02		.57		.03			.01	.02		1.47			T.			.02	4.67
Sandy Hook***	...do	.60	T.			.38	.88	T.			.29		T.	.02		.01		.32	T.	T.			.14	.22		.94						T.	3.80

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Preciitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.08	30.67	4	29.35	6	16.5	66	s.	6	74	59	66	48
ong Branch	30.08	30.68	5	29.29	6	......	......	......	......	69	56	58	......
oorestown No. 2	......	......	......	......	......	......	......	......	......	75	60	65	......
ew York, N. Y	30.06	30.71	5	29.27	6	19.8	60	s.	6	67	59	58	56
hiladelphia, Pa	30.10	30.71	4	29.27	6	13.2	45	s.	6	68	64	64	65
idgefield	30.06	30.70	5	29.26	6	......	......	......	......	......	......	......	......
andy Hook	30.06	30.70	5	29.23	6	17.4	50	sw.	19	74	67	68	60
renton	30.07	30.68	4	29.29	6	11.1	36	nw.	13	73	62	64	59
erona	30.04	30.67	5	29.22	6	9.4	38	nw.	29	67	55	54	51

Daily Temperatures for January, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	36	39	33	35	35	59	32	25	41	42	44	35	31	27	38	32	30	44	56	45	38	39	44	40	32	30	36	35	27	30	32	36.8
	Minimum	23	26	17	23	14	31	20	12	14	29	26	23	21	5	16	10	22	28	38	24	19	23	28	23	19	20	16	23	18	20	17	20.9
Charlotteburg	Maximum	43	36	33	33	32	59	36	22	39	43	44	39	34	22	34	33	36	60	61	45	41	36	46	44	34	31	30	32	23	24	29	37.2
	Minimum	24	30	15	22	5	31	18	9	16	26	30	22	20	1	11	0	15	30	37	23	17	24	26	19	20	18	14	20	15	16	17	19.1
Dover	Maximum	44	40	32	35	46	58	....	32	40	45	38	33	35	25	38	34	33	52	61	48	40	38	45	34	32	30	32	31	24	25	30	37.7[a]
	Minimum	22	22	17	19	11	25	14	10	16	31	27	22	9	2	16	6	21	33	30	25	17	17	27	21	21	18	15	20	16	18	17	18.9
Layton	Maximum	32	39	30	33	30	59	30	25	40	47	42	34	33	18	34	35	27	52	60	48	30	38	45	36	24	28	30	23	25	25	30	34.9
	Minimum	16	21	11	21	7	26	18	10	14	27	22	21	10	1	14	3	19	27	29	17	14	17	20	20	21	19	12	14	17	18	17	16.9
Newton	Maximum	36	42	33	35	37	61	31	24	39	43	45	33	34	20	36	35	26	45	62	45	36	38	47	40	26	31	32	30	31	25	30	36.4
	Minimum	25	23	16	22	13	28	16	9	13	29	25	20	13	−1	14	10	18	25	35	25	25	22	25	20	18	17	13	18	15	12	17	18.7
Phillipsburg	Maximum	40	41	32	35	48	58	34	29	40	44	40	34	38	20	39	32	32	43	61	45	32	38	44	35	33	30	33	32	28	30	30	37.1
	Minimum	26	26	21	21	17	27	17	13	19	33	27	25	13	7	19	13	27	31	34	28	23	24	29	25	26	21	18	23	21	23	19	22.5
Sussex	Maximum	33	38	32	34	33	59	35	26	41	41	45	34	33	20	35	36	30	44	60	44	37	36	44	39	28	30	33	....	28	26	30	36.1[a]
	Minimum	18	23	11	23	11	29	19	11	14	21	25	23	16	2	13	4	18	25	33	24	16	17	28	21	19	18	13	....	15	18	18	18.2[a]
The Red Sandstone Plain.																																	
Bayonne	Maximum	42	45	36	39	37	....	36	26	44	52	40	37	40	20	41	38	42	48	64	48	34	42	48	34	33	32	36	36	27	29	32	38.6[a]
	Minimum	32	28	24	32	24	27	20	13	20	40	32	26	31	7	24	24	30	36	42	30	22	22	30	24	22	22	18	20	18	20	21	25.2
Boonton§§	Maximum	45	40	32	36	61	63	34	27	41	47	36	30	37	22	39	35	37	63	58	48	31	38	48	39	48	30	33	33	27	28	31	39.3
	Minimum	20	30	14	19	10	15	22	12	13	25	26	25	20	4	5	8	11	23	33	21	18	18	27	23	22	20	17	17	16	16	19	18.4
Elizabeth	Maximum	....	....	34	36	46	62	36	28	45	49	47	36	40	27	41	36	36	45	63	49	42	39	41	41	33	33	34	35	27	30	32	39.4[b]
	Minimum	30	34	18	22	21	33	24	13	17	35	32	27	22	6	11	15	25	32	40	25	20	23	29	25	26	21	17	25	19	21	12	23.2
Flemington	Maximum	37	44	33	39	35	59	39	29	42	47	47	35	37	24	42	38	34	44	62	47	39	39	47	40	32	33	39	34	29	32	31	39.0
	Minimum	25	28	18	25	17	34	21	12	16	30	27	24	18	5	17	11	24	32	38	26	19	23	29	24	25	19	17	23	19	20	16	22.0
Highwood	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Maximum	45	48	35	37	45	62	34	28	42	50	45	38	37	24	40	34	40	48	62	46	34	40	46	38	35	34	35	34	27	29	33	39.5
	Minimum	34	28	22	30	27	30	22	14	18	37	31	26	17	7	21	20	29	34	40	25	21	28	29	25	29	22	18	24	18	20	21	24.7
Lambertville	Maximum	44	44	38	34	36	58	33	23	38	48	46	34	36	22	39	30	34	43	60	45	37	36	44	34	32	31	29	30	28	29	29	36.9
	Minimum	28	25	16	18	20	28	19	11	14	31	25	23	21	4	15	12	27	32	40	27	18	20	28	23	25	18	15	20	18	20	17	21.2
Little Falls§§	Maximum	44	38	33	37	62	62	33	32	48	47	37	32	36	24	39	37	39	64	59	47	33	36	48	36	29	33	33	36	26	28	32	39.4
	Minimum	21	32	19	23	13	23	24	13	16	28	29	26	27	5	8	10	18	26	39	24	19	22	29	24	23	21	17	22	18	19	20	21.2
New Brunswick	Maximum	45	46	34	36	41	63	37	26	42	52	50	35	38	27	40	34	34	44	63	49	41	38	46	43	34	34	34	34	29	29	31	39.6
	Minimum	29	30	18	27	19	33	23	13	16	30	30	26	23	5	17	15	25	32	38	27	20	23	28	25	25	21	17	25	19	22	18	23.2
Paterson	Maximum	38	38	34	36	38	60	45	26	42	48	46	35	39	32	39	35	33	50	64	48	47	39	48	42	34	35	34	35	26	31	33	39.7
	Minimum	29	30	21	28	21	38	23	15	19	34	31	27	22	7	18	16	25	33	42	28	21	26	30	26	24	23	19	24	20	21	22	24.6
Plainfield	Maximum	39	47	36	37	38	62	33	26	41	50	41	38	36	19	40	36	40	50	62	47	32	40	46	35	36	30	34	34	27	29	33	38.5
	Minimum	25	28	18	26	17	30	23	12	15	30	30	25	14	5	17	10	25	34	40	25	20	24	29	25	28	20	15	25	18	19	19	22.3
Ridgefield	Maximum	43	40	31	36	52	60	34	25	40	47	35	33	36	29	39	33	34	56	62	46	29	37	47	33	32	29	32	34	25	29	30	37.7
	Minimum	26	23	20	21	17	26	24	14	18	33	26	24	11	6	17	16	26	32	31	23	20	25	29	24	24	20	17	21	18	19	16	21.5
Somerville	Maximum	....	40	34	38	41	60	36	27	41	48	46	35	39	24	40	36	34	45	63	47	41	39	45	39	33	33	34	34	29	29	32	38.7[a]
	Minimum	....	22	16	22	18	31	24	13	14	31	27	25	21	5	17	10	24	33	33	24	18	20	29	24	26	19	16	24	19	22	17	21.5[a]
South Orange	Maximum	39	44	34	37	35	61	35	27	42	48	46	35	37	24	40	35	33	48	61	46	31	40	46	44	33	33	34	34	27	30	33	38.5
	Minimum	25	30	17	23	19	30	23	13	15	28	30	26	19	5	15	12	32	33	41	24	18	22	29	24	25	20	16	24	18	21	18	22.1
Verona	Maximum	44	39	32	33	49	60	34	24	39	47	36	33	35	18	37	32	33	53	62	45	30	36	44	31	32	30	30	30	24	26	31	36.4
	Minimum	28	22	17	22	18	25	16	12	17	33	29	23	9	5	17	14	23	31	31	25	18	25	27	22	22	19	17	19	16	18	19	20.6
New York, N. Y.	Maximum	49	44	34	37	53	60	34	28	43	50	41	38	38	23	40	37	40	55	62	47	32	40	47	35	36	35	35	34	26	29	33	39.8
	Minimum	34	25	22	30	28	27	17	14	20	39	31	25	12	7	23	22	29	35	38	26	21	29	30	24	27	22	18	21	18	20	21	24.4
The Southern Interior.																																	
Belleplain	Maximum	....	....	38	45	48	60	39	22	46	54	51	38	41	30	....	41	47	58	63	....	....	40	49	44	47	....	....	....	....	35	32	44.0[i]
	Minimum	....	....	13	25	14	35	26	16	11	28	26	27	20	5	13	....	28	35	....	....	15	20	26	24	28	....	....	....	19	19	15	21.2[i]
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	47	43	35	38	42	61	43	28	41	50	46	35	38	27	42	38	37	48	64	53	43	39	48	45	36	35	35	34	32	34	32	40.9
	Minimum	28	30	18	24	19	41	24	15	17	32	28	26	25	8	17	16	29	34	46	32	23	25	28	26	29	23	19	28	21	20	19	24.8
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	47	44	35	36	42	62	36	25	41	50	46	35	37	25	41	34	37	47	67	49	44	41	47	43	36	35	34	34	30	32	32	40.1
	Minimum	22	30	18	25	16	32	22	12	16	29	25	19	22	6	15	11	23	32	42	28	17	21	28	24	27	21	12	23	19	22	17	21.8
Indian Mills	Maximum	52	51	36	39	44	61	37	29	44	50	48	36	41	26	42	41	40	51	63	54	45	38	48	44	41	40	36	34	30	33	32	42.1
	Minimum	29	31	12	26	14	36	29	19	11	30	24	26	21	6	13	13	28	36	48	25	20	20	29	26	29	23	14	26	20	23	16	23.3
Lakewood	Maximum	53	50	35	37	45	60	37	25	41	52	49	36	39	22	40	34	42	51	60	50	38	39	45	41	40	38	33	34	29	31	32	40.6
	Minimum	26	28	17	27	17	34	24	15	15	29	28	26	22	7	13	14	27	37	44	25	20	24	30	25	31	23	17	26	20	23	17	23.6
Moorestown	Maximum	47	47	37	42	45	61	37	26	43	49	45	36	39	25	44	38	37	48	63	51	44	....	50	40	36	35	36	36	33	36	32	41.3
	Minimum	28	28	17	25	17	32	22	13	15	29	25	25	22	8	14	15	27	34	43	28	21	....	23	24	27	22	19	25	19	21	19	22.9
Moorestown No. 2	Maximum	49	41	35	37	42	61	37	25	41	49	37	34	38	21	42	32	37	47	62	50	31	37	47	32	35	30	33	34	30	33	31	38.4
	Minimum	29	23	19	20	20	27	16	13	21	37	25	24	9	6	14	15	30	35	33	30	22	23	28	26	29	23	20	22	20	23	19	22.6
Pleasantville§§	Maximum	52	40	36	42	....	57	39	28	48	55	41	33	42	40	42	40	45	57	66	59	35	38	50	38	47	33	37	37	32	35	23	42.2
	Minimum	18	30	14	18	14	....	21	14	11	25	28	27	20	4	15	18	19	38	40	24	16	19	23	24	28	23	15	21	19	22	15	20.8
Runyon	Maximum	44	46	38	39	41	62	35	26	41	52	46	32	38	27	38	40	34	44	64	46	44	40	44	45	38	34	34	34	28	33	34	40.0
	Minimum	30	28	14	21	11	35	22	12	12	24	30	25	25	5	16	5	20	33	41	19	17	17	27	24	24	18	14	25	19	17	12	20.5
Trenton	Maximum	47	41	36	38	56	60	37	25	42	52	40	36	37	22	41	35	37	58	63	47	35	40	46	35	34	33	32	34	30	33	33	39.8
	Minimum	32	24	21	26	21	27	16	12	20	38	29	24	11	7	22	18	30	34	36	29	22	27	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23.6
Tuckerton	Maximum	53	50	36	43	46	56	44	31	46	53	52	40	42	40	42	41	45	50	65	62	45	40	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44.6
	Minimum	33	29	16	27	19	41	13	13	14	28	25	26	22	5	16	16	28	28	42	28	18	20	28	25	29	22	16	26	19	21	15	22.8
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia	Maximum	50	47	35	39	57	62	38	27	41	52	42	38	39	22	44	36	41	61	63	53	36	38	50	37	38	34	35	35	32	33	32	41.5
	Minimum	36	27	25	32	27	28	20	16	23	40	32	25	14	9	22	25	33	37	40	35	26	29	30	29	31	25	23	25	22	25	23	26.9
The Sea Coast.																																	
Asbury Park	Maximum	50	51	35	37	47	57	38	27	42	52	44	41	40	25	40	36	41	50	60	51	37	40	47	38	42	35	34	35	30	33	35	41.0
	Minimum	32	26	21	28	28	30	20	15	18	36	31	25	18	7	20	18	31	37	39	31	22	25	30	26	32	23	19	23	20	23	20	25.0
Atlantic City	Maximum	51	48	39	42	52	56	39	26	44	51	44	44	41	33	42	38	44	49	64	58	35	39	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.7
	Minimum	42	26	22	29	28	30	18	15	22	41	31	28	14	8	27	22	38	39	39	33	26	26	33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26.8
Cape May City	Maximum	50	44	39	42	53	55	40	26	47	53	42	41	44	30	43	39	50	54	62	57	37	36	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.5
	Minimum	39	28	21	25	25	30	21	18	26	40	30	28	16	12	29	26	38	40	37	33	26	26	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27.7
Long Branch	Maximum	50	35	33	32	45	62	25	21	36	53	40	33	46	20	30	31	36	50	62	44	34	33	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36.6
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22.4
Sandy Hook	Maximum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37.8
	Minimum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25.6

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville••	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	***
	Wind movement	94	89	60	42	*	299	129	78	89	86	62	82	115	56	73	51	47	133	64	86	37	46	85	62	102	78	46	141	218	90	70	2,71 ***
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	Wind movement	12	16	14	81	90	186	135	107	20	86	52	52	45	93	12	14	32	22	133	49	45	28	82	20	39	52	58	29	156	91	24	1,87

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. ••Observations taken in the morning, and entered on preceding day. **** Pan frozen.

05
NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

MAY 11 1929
UNIVERSITY

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. FEBRUARY, 1929. No. 2

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

No mean temperature below normal was recorded for any New Jersey station for the month, though one station, Lambertville, was just normal. While the State average temperature was 2.2° above normal, February last year and the year before was warmer. This was the fifth consecutive month with mean temperature above normal. As should be expected, the coldest section was the extreme northern interior, and the highest means were turned in by southern costal stations. The warmest day generally was the 18th; the coldest was the 24th, although the minimum of the month occurred at several stations on other dates, particularly the 20th. There were no clearly defined cold waves.

Precipitation averaged over four inches. Adjoining parts of several interior northern counties were below normal for the month, but aside from these there were only a few local negative departures, and they were small. The average snowfall of 9.2 inches was a little more than normal,—about a third of an inch.

No destructive wind storms were reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 35 stations, was 31.6°, which was 2.2° above normal. The highest temperature was 63° at Indian Mills on the 19th, and the lowest, 9° below zero, at Layton on the 24th. The greatest daily range of temperature was 45° at Boonton on the 25th. The highest monthly mean temperature was 35.3° at Cape May City, and the lowest, 26.7° at Layton.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +2.0°; Red Sandstone Plain, +1.4°; Southern Interior, +1.6°; Sea Coast, +1.2.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 4.06 inches, which was 0.42 inch above normal. The average total snowfall at 19 selected stations was 9.2 inches. The greatest monthly amount was 15.6 inches at Culvers Lake. The greatest monthly precipitation was 5.92 inches, at Chatham, and the least, 2.76 inches at Newton. The greatest amount of precipitation in any 24 consecutive hours was 2.32 inches at Paterson on the 6-7th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1929, to date, by sections, is: The Highlands, +0.20 inch; Red Sandstone Plain, +0.09 inch; Southern Interior, +0.77 inch; Sea Coast, +0.10 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 11 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 45 miles per hour from the east at Atlantic City on the 21st. Moderately high winds were also noted generally on the 1st, 7th, and 21st.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 13, which was 2 more than normal; partly cloudy, 7, or 1 less than normal; cloudy, 8, 1 less than normal. The per cent of possible sunshine was 60, which was 4 per cent above normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 30.10 inches, which was normal. The highest reading was 30.47 inches on the 13th at Sandy Hook and Trenton, and the lowest, 29.54 inches on the 21st at Long Branch and on the 7th at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 2.9 feet, and the highest reading was 6.8 feet on the 28th. At Trenton the river was frozen around the gage on sixteen days, therefore the mean stage could not properly be determined. Of the twelve days on which readings were obtained the highest was 4.6 feet on the 27th.

Dense fog occurred on one or more of the following dates: 4, 7, 9, 10, 15, 17, 26, and 27. Sleet occurred on one or more of the following dates: 5, 6, 20, 21, and 28. Light hail, which resulted in no damage, was reported by Charlotteburg on the 28th and by Newton on the 19th and 28th. An aurora was observed on the 2d at New Brunswick.

CHARLES J. BATES.

Accepting a sad duty, we chronicle the passing away of one of our highly esteemed veteran cooperative observers. Charles J. Bates, of the Highwood station, died suddenly at his home in Englewood on Monday, January 14, 1929. His true public spirit and his personal interest in weather matters combined to produce an excellent series of records at Highwood, and his cordial cooperation was a source of gratification to us. The Section Center keenly feels the loss of this associated worker.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	23.9	54	−2	3.93	5.85	1.44	......				
1886	28.9	64	−10	5.42	8.00	4.13	......	......	......	......	......
1887	33.9	69	6	5.24	6.74	4.13	......	......	......	......	......
1888	30.6	60	−5	3.53	6.01	2.04	......	......	......	13	13
1889	27.7	53	−3	2.49	3.80	1.65	......	......	......	9	8
1890	**39.9**	**76**	**14**	4.17	5.32	2.43	......	......	......	9	8
1891	38.0	71	1	5.11	7.20	3.70	......	......	......	12	10
1892	33.6	58	7	1.63	3.62	0.67	......	6	9	13	14
1893	30.1	63	−1	5.73	8.90	3.14	......	7	9	13	7
1894	29.7	62	−11	4.42	6.17	3.25	...	7	8	13	11
1895	23.6	57	−12	1.28	2.34	*0.55*	11.6	9	8	11	11
1896	32.1	62	−12	**6.77**	**10.06**	**4.82**	6.7	13	9	6	5
1897	32.5	59	−6	3.61	6.37	2.38	8.0	9	9	11	12
1898	32.7	65	−15	3.48	5.45	1.55	2.0	8	10	10	8
1899	25.8	60	−17	6.06	8.77	3.78	**31.3**	12	7	9	9
1900	31.0	69	−6	5.30	7.88	3.27	9.6	10	6	12	15
1901	25.4	*52*	−6	*0.94*	*1.65*	0.69	4.9	9	9	10	10
1902	27.4	62	−7	6.24	8.44	4.29	16.5	15	9	4	4
1903	33.7	70	−16	4.87	6.60	3.74	6.7	12	6	10	9
1904	24.8	65	−16	2.45	3.09	1.36	5.6	12	8	8	10
1905	*23.4*	53	−18	2.53	3.96	0.70	7.3	13	8	8	8
1906	30.9	64	−12	2.58	3.85	1.77	5.4	14	7	7	7
1907	23.6	55	−22	2.67	3.90	1.82	20.8	14	7	7	7
1908	28.1	65	−17	4.79	7.44	2.85	11.9	14	7	7	8
1909	37.8	72	−2	4.96	6.78	3.55	2.3	10	10	9	9
1910	30.5	69	−11	3.08	4.81	1.06	6.2	6	10	12	12
1911	30.9	67	−12	2.78	4.06	1.76	11.2	10	9	9	10
1912	27.7	61	−14	2.49	3.12	1.68	2.8	8	7	13	11
1913	30.6	70	−5	2.49	3.21	1.48	3.5	11	12	6	5
1914	25.9	67	−12	2.85	4.94	1.89	15.1	16	6	6	7
1915	35.7	75	−7	5.37	7.28	2.97	3.5	12	7	9	9
1916	28.1	63	−18	4.21	6.17	2.84	11.4	11	6	11	8
1917	28.1	62	−19	1.95	2.80	0.92	8.3	10	6	13	11
1918	29.0	67	*−23*	2.08	3.41	1.03	2.6	10	9	9	11
1919	33.6	65	4	3.39	6.48	1.37	1.2	12	8	8	7
1920	27.9	54	−17	4.20	7.20	2.39	20.0	15	4	9	10
1921	34.0	71	−5	3.81	5.82	2.58	13.6	11	8	10	11
1922	33.6	73	−10	2.94	4.60	1 80	8.5	10	8	10	10
1923	26.1	56	−12	2.58	3.74	1.51	13.8	10	8	10	10
1924	28.9	62	−3	4.10	6.11	2.45	11.9	10	8	10	12
1925	37.3	72	−1	2.23	4.64	1.18	*0.7*	13	5	11	9
1926	29.4	57	−11	4.54	6.30	2.86	21.2	12	6	10	7
1927	36.1	66	4	3.12	4.55	2.18	5.1	9	5	14	11
1928	32.1	63	−6	4.05	5.63	2.17	4.4	10	8	10	11
1929	31.6	63	−9	4.06	5.92	2.76	9.2	12	7	10	10

W. B. O. Philadelphia-3-21-29 830.

Climatological Data for February, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	30.3	+3.2	55	25	0	24	37	4.81	+0.97	1.60	13.8	6	19	2	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	29.2	+3.6	55	18	6	5†	36	3.07	−0.95	1.26	9.0	10	3	5	20	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	−8	24	....	3.60	+0.54	1.57	15.6	7	14	7	7	nw.	Brice E. Riker.
Dover	Morris	600	45	29.1^{a}	+2.9	56^{a}	18	0	24	36	3.94	−0.09	1.49	11.0	7	4	17	7	......	William C. Harris
Layton	Sussex	480	28	26.7	+3.1	54	27	−9	24	44	3.34	+0.60	1.18	13.5	9	13	5	10	ne.	A. M. Depue.
Newton	Sussex	769	45	28.4^{a}	+1.9	54^{a}	25	5^{a}	24	32^{a}	2.76	−0.80	1.32	9.5	6	11	7	10	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	29.4	+1.5	55	18	2	24	37	4.13	+0.49	1.55	11.0	7	20	2	6	......	Town Engineer.
Sussex	Sussex	442	34	27.8	+2.4	55	27	−8	24	39	3.20	−0.18	1.35	13.0	7	16	3	9	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	28.7	+2.7	56	18	−9	24	44	3.61	+0.07	1.60	12.0	7	12	6	10	uw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	32.8	+3.4	57	18	16	20	23	4.90	+0.92	2.15	9.5	7	13	5	10	w.	William Mann.
Boonton	Morris	400	§39	28.2	+1.1	54	18	3	24	45	2.88	−1.09	1.25	......	8	17	1	10	nw.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	5.92	+2.49	1.40	13.0	9	15	9	4	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	33.2	+2.7	57	18	13	23	32	4.50	+0.33	1.77	7.4	9	12	9	7	nw.	Union County Park Com.
Flemington	Hunterdon	140	§43	31.7	+2.9	59	18	0	24	44	3.96	+0.42	1.14	11.0	8	17	5	6	w.	Hiram E. Deats.
Highwood‡‡	Bergen	90	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Jersey City	Hudson	10	31	33.5	+2.9	56	18	14	20	22	4.39	+0.67	1.80	8.7	8	6	16	6	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	**430	42	30.4	0.0	56	18	11	23†	30	3.83	+0.35	1.38	10.0	9	15	7	6	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	30.2	+0.6	56	18	4	24	34	4.41	+0.94	2.17	7.1	9	13	9	6	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	32.0	+1.2	58	18	5	24	36	3.69	+0.07	1.33	8.2	9	12	11	5	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	......	......	......	......	....	3.87	......	2.21	......	7	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	32.5	+2.3	58	18	12	24	31	4.82	+0.61	2.32	10.0	8	17	3	8	nw.	Marion T. Probert.
Plainfield	Union	120	41	31.0	+2.3	57	18	4	24	34	3.57	−0.39	1.21	9.1	7	12	11	5	nw.	E. D. Pearson.
Ridgefield	Bergen	80	12	30.7	......	57	18	14	4†	30	4.61	......	1.58	8.2	7	11	9	8	nw.	George P. Kirsten.
Somerville	Somerset	70	46	31.4	+2.5	58	18	1	24	39	3.87	+0.09	1.33	8.0	8	18	4	6	w.	Arthur Gerlich.
South Orange	Essex	200	57	32.5	+3.5	58	18	12	23	33	3.41	−0.52	1.38	7.0	8	8	7	13	w.	Everett W. Bird.
Verona	Essex	490	3	29.7	......	54	18	11	20†	26	4.73	......	2.11	10.3	7	11	8	9	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	4.27	......	1.80	.....	7	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	33.4	+2.1	55	18	14	20	26	4.30	+0.48	1.87	8.8	7	8	10	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	31.4	+2.1	59	18	0	24	45	4.21	+0.38	2.32	9.1	8	13	8	7	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	33.4	+2.1	57	18	14	22	40	3.94	+0.44	1.23	8.0	8	12	7	9	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	31.9	+2.5	58	18	10	4†	36	3.39	−0.21	1.12	8.5	8	15	8	5	nw.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	33.4	+1.6	63	19	5	24	40	5.00	+1.55	1.80	8.5	8	10	11	7	sw.	James M. Armstrong.
Lakewood	Ocean	54	25	32.3	+2.6	57	18	6	24	34	4.96	+1.39	1.25	8.0	9	12	6	10	w.	R. W. Holman.
Moorestown	Burlington	75	66	33.0	+1.7	58	19	8	24	37	3.75	+0.27	1.23	10.0	9	17	3	8	nw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	31.8	......	58	18†	9	24	33	3.87	......	0.96	6.5	9	15	6	7	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	4.14	+1.35	1.27	8.6	11	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	32.2	......	58	18	8	24	33	4.33	+1.52	1.75	......	12	13	8	7	nw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	......	......	57	18	...	......	....	5.17	......	1.60	......	8	12	14	2	ne.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	33.0	+2.3	58	18	14	20	29	3.51	+0.24	1.46	7.9	7	10	9	9	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	3.60	......	1.50	7.7	7	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	34.7	+3.9	60	18	11	24	33	3.89	+0.23	1.02	9.0	10	18	0	10	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa.	......	117	58	35.2	+1.3	58	18	17	20	29	4.24	+0.92	1.38	8.2	8	11	8	9	nw.	U. S. Weather Bureau.
Means and extremes	......	......	...	32.9	+2.4	63	19	5	24	40	4.13	+0.75	1.80	8.3	9	13	7	8	nw	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	33.6	+2.2	57	17	16	23†	29	3.50	0.0	1.20	8.0	7	18	5	5	nw.	Information Bureau.
Atlantic City	Atlantic	16	56	35.0	+1.4	53	26	18	4	20	4.33	+0.97	1.22	7.5	12	13	6	9	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	35.3	+1.2	56	25	17	4	25	4.76	+1.47	1.70	9.3	13	9	8	11	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	32.1	+1.7	60	18	8	24	34	4.11	+0.20	1.70	7.5	8	7	14	7	nw.	William D. Martin.
Sandy Hook	Monmouth	22	31	32.4	+1.8	52	18	17	23	18	3.72	−0.03	1.51	6.6	7	9	10	9	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	33.7	+1.7	60	18	8	24	34	4.08	+0.52	1.70	7.8	9	11	9	8	nw.	
For the State	......	......	....	31.6	+2.2	63	19	−9	24	45	4.06	+0.42	2.32	9.2	8	13	7	8	uw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means. ** Elevation corrected to 430 feet from 370 feet.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for February, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						.05	1.60		T.										T.	.25	1.20					1.04		.67				4.81
Charlotteburg	Passaic	.01					.03	1.26			.02			T.		.02					.11	.55					.67	.15	.25				3.07
Culvers Lake	Delaware						.07	1.57		T.	T.				T.	T.				T.	.30	.62					.83	.02	.19				3.60
Dover	Passaic						*	1.49		.11											.15	.85					1.02		.32				3.94
Layton	Delaware						*	1.18		.06	T.									*	.32	.52					.99	.02	.25				3.34
Newton	Delaware	T.				.02	1.32				T.		T.		T.					T.	.30	.42					.48	T.	.22				2.76
Phillipsburg	...do						.11	1.10		.04										T.	.18	.86					1.55		.29				4.13
Sussex	Hudson						T	.55								.04				.03	.33	.72					1.35		.18				3.20
The Red Sandstone Plain.																																	
Bayonne	Coast						*	2.15		.15	T.										.20	.85	T.				1.35		.20				4.90
Boonton ‖	Passaic	T.					T.	1.25			.04					T.					.08	.15	.12				.27	.77	.20				2.88
Chatham ‖	...do	T.					.13	1.40	.05		.43	T.				T.					.32		1.07				1.12	1.03	.37				5.92
Elizabeth	Coast	.02					.03	1.77		T.	.16				T.						.07	.64					1.25	.38	.18				4.50
Flemington	Raritan	T.					.02	1.12			.27									T.	.15	.58	T.				1.14	.44	.24				3.96
Highwood	Hackensack																																......
Jersey City	Coast	T.					.15	1.80		.15	.03				T.						.11	.70					1.30		.15				4.39
Lambertville	Delaware	.02					.04	1.11		T.	20										.08	.72					1.38	.04	.24				3.83
Little Falls. ‖	Passaic						.01	2.17			.18										.11	.41	.16				.44	.73	.20				4.41
New Brunswick	Raritan	.02					.02	1.33		T.	.11										.07	.49					1.15	.33	.17				3.69
New Milford.**	Hackensack						.40	1.81		.02				.02								.15					1.18		.29				3.87
Paterson	Passaic	.02					.21	2.32		T.	.03				T.						.11	.64					1.17	.02	.30				4.82
Plainfield	Raritan						.08	1.07		.17	T.			T.	T.						.12	.70	T.				1.21		.22				3.57
Ridgefield**	Hackensack						.34	1.54		.16				T.	T.	T.					.10	.67					1.58		.22				4.61
Somerville	Raritan						.02	1.23			.21										.20	.60					1.33	.02	.26				3.87
South Orange	Rahway	T					.02	1.38		.03	.06											.37					.90	.46	.19				3.41
Verona**	Passaic	T				T.	.45	1.68		.06				T.		T				T.	.18	.61					1.45	T.	.30				4.73
Woodcliff Lake**	Hackensack						.88	.92		.12											.12	.37					1.23		.63				4.27
New York, N. Y***	Coast	T.				T.	.34	1.54		.16	T.				T.					T.	.10	.67					1.36		.13				4.30
The Southern Interior.																																	
Belleplain	Tuckahoe																																......
Bridgeton	Coast																																......
Burlington	Delaware						.03	.98		T.	.40										.15	.70					1.23	.02	.43				3.94
Clayton	Delaware																																......
Hightstown	Raritan	T.					.05	1.07			.12										.06	.84					.89	.27	.09				3.39
Indian Mills	Mullica	T.					.06	1.06		.05											.08	1.02					1.80	.42	.51				5.00
Lakewood	Metedeconk	T.					.10	1.15		.12	.65										.03	.86					1.25	.50	.30				4.96
Moorestown	Delaware						.02	.95		.03	.27										.05	.88					1.23	.16	.16				3.75
Moorestown No. 2.	Delaware	T.					.01	.96			.32										.02	.77	.20				.87	.47	.25				3.87
Northfield	Coast						.01	.51		.14	.31				.19		.02				.02	.97					1.27	.19	.51				4.14
Pleasantville ‖	Coast						T.	.65			.58				.07		.17				.01	.63		T.			.75	1.00	.47				4.33
Runyon	Coast						.11	1.56			.21										.12	1.30					1.40	.20	.27				5.17
Trenton***	Delaware					T.	.17	.84		.19											.09	.53					1.46		.23				3.51
Trenton No. 2 ‖	Delaware	.01					.01	.93			.21										.08	.38	.26				.79	.71	.22				3.60
Tuckerton	Coast						.03	.65			.40				.10		.03				.10	.70					1.02	.45	.41				3.89
Vineland	Maurice																																......
Phila., Pa***	Delaware					T.	.22	1.12		.25											.07	.87				.05	1.33		.33				4.24
The Sea Coast.																																	
Asbury Park	Coast					T.	.15	.26		.48	.16										T.	1.20					.85	.30	.10				3.50
Atlantic City***	...do	T.				T.	.32	.32		.60	.03			.09	.07		.05				.03	1.10	T.	T.		.03	1.21		.48				4.33
Cape May City	...do					T.	.01	.51		.13	.48	T.		.01	.14		.10	T.			.03	.97		.01		T.	1.68	.02	.67				4.67
Long Branch	...do					T.	.36	.63		.38	.12										.08	.59					1.70		.25				4.11
Sandy Hook***	...do						.25	.85		.22				T.							.06	.64					1.51		.19				3.72

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T, Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Highest			Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
							Miles per hour	Direction	Date				
Atlantic City	30.10	30.44	13	29.57	28	14.7	45	e.	21	82	68	74	57
Long Branch	30.08	30.42	13	29.54	21					76	66	68	
Moorestown No. 2		30.44	13							89	65	72	
New York, N. Y	30.10	30.45	13	29.57	7	14.2	40	nw.	1	68	60	60	64
Philadelphia, Pa	30.12	30.46	13	29.61	28	12.3	34	nw.	1	75	62	65	68
Ridgefield													
Sandy Hook	30.10	30.47	13	29.54	7	13.8	38	ne.	21	81	69	74	63
Trenton	30.10	30.47	13	29.60	28	9.3	26	ne.	7	77	59	67	64
Verona	30.10	30.46	13	29.61	28	6.9	27	nw.	1	71	53	63	55

Daily Temperatures for February, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	3	35	37	37	39	33	48	45	41	39	35	39	30	39	42	49	50	54	43	32	28	38	34	32	55	44	52	44	....	....	....	40.2
	Minimum	21	19	18	13	11	26	31	30	30	30	15	15	10	16	20	23	18	25	28	18	11	14	11	0	18	34	33	33	....	....	....	20.4
Charlotteburg	Maximum	28	27	32	31	34	33	37	46	44	41	34	32	27	41	40	48	49	55	54	32	21	39	34	36	51	50	54	53	....	....	....	39.4
	Minimum	16	25	15	13	6	25	32	28	30	31	14	14	12	12	16	20	13	20	27	7	8	20	8	6	22	32	33	31	....	....	....	19.1
Dover	Maximum	28	30	35	34	34	34	46	45	42	39	33	25	27	36	41	46	48	56	45	....	28	38	31	36	52	43	51	38	....	....	....	38.6ᵃ
	Minimum	18	17	16	14	7	26	33	30	30	33	14	14	7	16	22	23	17	24	23	9	12	24	9	0	25	32	33	21	....	....	....	19.6
Layton	Maximum	25	27	32	34	37	30	44	43	44	35	35	24	28	36	41	46	48	53	41	23	25	39	26	35	55	37	54	42	....	....	....	37.1
	Minimum	15	17	16	9	1	22	30	30	32	24	9	9	3	13	19	20	12	22	20	7	7	12	0	-9	21	31	33	32	....	....	....	16.3
Newton	Maximum	27	28	33	31	30	45	42	....	42	38	33	28	27	36	39	46	47	52	46	25	22	40	25	36	54	42	52	45	....	....	....	37.8ᵃ
	Minimum	15	17	15	9	23	23	29	....	30	28	12	11	8	15	22	22	20	30	23	6	8	19	8	5	22	31	32	30	....	....	....	19.0ᵃ
Phillipsburg	Maximum	27	30	34	34	34	36	46	42	41	38	33	28	30	37	40	46	36	55	40	26	28	38	29	39	51	41	51	42	....	....	....	37.6
	Minimum	23	21	19	17	15	30	35	29	32	28	19	17	14	14	14	25	22	21	23	13	13	15	11	2	17	36	34	34	....	....	....	21.2
Sussex	Maximum	27	28	37	34	32	30	45	44	41	39	34	31	28	35	42	47	49	53	48	26	23	39	33	37	53	44	55	51	....	....	....	38.8
	Minimum	17	18	17	14	7	22	29	30	32	28	12	10	6	15	20	21	13	21	24	−7	4	15	2	−8	14	32	33	32	....	....	....	16.9
The Red Sandstone Plain.																																	
Bayonne	Maximum	31	33	35	34	37	38	50	48	50	38	34	27	32	37	36	47	52	57	45	26	30	38	33	40	56	44	51	45	....	....	....	40.1
	Minimum	20	22	21	18	23	27	36	33	36	24	20	18	19	23	21	32	34	38	22	16	20	24	18	22	34	30	32	31	....	....	....	25.5
Boonton§§	Maximum	31	31	35	36	36	40	48	47	42	49	34	26	29	38	41	49	50	54	46	25	29	38	29	37	53	40	52	38	....	....	....	39.4
	Minimum	19	19	17	12	8	13	28	29	28	30	13	13	7	9	14	19	16	19	22	10	10	15	10	3	8	24	33	31	....	....	....	17.1
Elizabeth	Maximum	31	34	39	40	38	39	52	49	48	47	39	36	31	41	44	49	53	57	53	40	30	41	39	41	54	46	51	48	....	....	....	43.2
	Minimum	21	21	19	15	19	31	35	29	32	34	19	17	16	21	20	26	21	26	30	14	17	18	13	16	23	31	35	34	....	....	....	23.3
Flemington	Maximum	32	34	39	41	36	34	50	49	41	41	36	31	31	42	45	50	54	59	50	33	30	40	37	44	56	47	52	46	....	....	....	42.1
	Minimum	19	20	19	17	17	28	33	28	30	31	16	16	11	19	19	24	25	22	29	12	14	14	10	0	22	35	33	33	....	....	....	21.3
Highwood	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Maximum	32	34	37	35	40	40	51	47	48	42	36	30	31	39	43	49	50	56	47	28	31	40	31	38	53	42	53	45	....	....	....	41.0
	Minimum	20	20	20	18	22	31	37	33	35	30	20	18	17	25	26	32	30	35	29	14	21	24	16	19	31	35	35	34	....	....	....	26.0
Lambertville	Maximum	28	29	33	33	34	34	46	43	43	42	31	27	30	37	41	45	47	56	49	31	28	39	34	41	49	38	49	40	....	....	....	38.5
	Minimum	19	18	18	15	15	27	34	29	31	30	16	15	13	18	22	26	27	29	31	12	14	18	11	11	27	34	34	33	....	....	....	22.4
Little Falls§§	Maximum	30	30	38	38	38	38	50	47	41	39	35	26	28	34	42	47	51	46	42	26	40	40	34	38	54	39	52	35	....	....	....	39.6
	Minimum	20	21	18	12	10	17	30	28	31	33	18	16	11	18	19	25	20	22	29	13	14	18	13	4	21	34	34	33	....	....	....	20.8
New Brunswick	Maximum	30	32	36	36	34	35	49	46	45	43	35	31	30	37	43	49	50	58	55	40	30	40	36	41	54	49	51	50	....	....	....	41.6
	Minimum	20	21	18	12	16	30	34	28	30	34	19	18	15	20	20	28	23	29	30	13	11	16	12	5	27	35	34	33	....	....	....	22.5
Paterson	Maximum	32	34	36	35	35	35	48	45	43	42	35	31	30	35	44	49	52	58	50	31	29	41	35	39	53	43	55	48	....	....	....	40.8
	Minimum	21	22	20	17	18	29	34	32	35	25	20	19	16	21	29	30	27	27	30	14	15	21	15	12	25	35	35	34	....	....	....	24.2
Plainfield	Maximum	31	34	37	37	40	40	50	46	48	42	34	29	30	39	43	49	50	57	46	29	30	41	31	38	53	40	53	44	....	....	....	40.8
	Minimum	20	19	17	15	13	30	36	30	30	30	15	16	11	18	19	24	19	24	29	13	11	17	12	4	21	34	33	34	....	....	....	21.2
Ridgefield	Maximum	30	34	36	34	33	36	46	43	43	38	34	27	29	34	43	49	51	57	45	25	27	41	29	40	56	40	52	41	....	....	....	39.0
	Minimum	18	18	15	14	14	28	33	27	32	22	17	15	14	19	25	29	21	31	22	14	17	24	14	14	29	35	34	32	....	....	....	22.4
Somerville	Maximum	31	34	37	37	37	36	52	48	44	40	36	30	31	41	44	49	50	58	48	34	31	41	36	40	56	46	52	46	....	....	....	41.6
	Minimum	20	21	19	13	15	29	36	27	31	33	15	15	10	19	18	24	19	24	28	12	15	16	9	1	22	36	35	35	....	....	....	21.3
South Orange	Maximum	31	33	40	37	35	35	51	46	45	42	35	30	30	38	44	48	52	58	50	43	29	42	36	41	54	40	54	52	....	....	....	41.8
	Minimum	20	21	18	14	17	29	35	28	31	33	17	16	13	20	20	25	22	25	30	13	16	16	12	22	33	35	35	33	....	....	....	23.2
Verona	Maximum	27	30	33	32	33	36	47	43	44	38	33	25	27	34	41	45	47	54	41	23	26	38	26	37	50	40	50	40	....	....	....	37.1
	Minimum	18	19	18	16	15	28	34	30	34	21	18	16	13	18	24	28	25	32	19	11	14	23	11	11	31	33	33	32	....	....	....	22.3
New York, N. Y	Maximum	31	34	37	34	38	39	51	47	48	42	36	29	31	39	43	48	49	55	47	27	31	39	31	38	54	43	52	44	....	....	....	40.6
	Minimum	20	20	19	18	23	32	37	34	36	25	21	19	17	27	27	34	32	36	21	14	22	25	16	20	32	35	35	33	....	....	....	26.1
The Southern Interior.																																	
Belleplain	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	31	34	36	36	39	38	49	47	46	44	35	31	33	40	45	47	50	57	55	55	32	40	43	44	53	51	51	50	....	....	....	43.3
	Minimum	19	21	20	16	18	30	30	30	31	24	20	18	17	20	21	23	28	30	29	15	19	14	15	16	26	37	35	34	....	....	....	23.4
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	31	34	36	36	40	42	51	47	46	43	35	32	33	40	44	48	51	58	51	39	31	43	36	43	57	46	55	46	....	....	....	42.6
	Minimum	19	18	15	10	11	29	34	26	30	32	16	17	13	19	21	25	20	25	25	13	16	17	10	11	21	36	33	32	....	....	....	21.2
Indian Mills	Maximum	30	31	36	36	40	42	50	50	53	48	37	30	34	43	47	44	51	60	63	56	33	50	42	45	57	48	50	50	....	....	....	44.9
	Minimum	18	19	15	10	11	32	39	25	29	35	12	14	10	21	18	30	20	25	26	16	19	17	15	5	25	38	35	35	....	....	....	21.9
Lakewood	Maximum	30	33	35	35	36	39	50	·45	55	46	34	29	33	37	42	43	49	57	51	40	34	42	37	40	41	43	49	47	....	....	....	41.5
	Minimum	18	20	16	14	11	32	39	27	29	34	19	17	13	26	23	29	22	25	27	16	16	20	16	6	28	35	34	34	....	....	....	23.1
Moorestown	Maximum	33	36	39	43	41	39	45	50	47	44	37	37	35	44	42	46	52	56	58	50	33	45	38	42	48	46	49	48	....	....	....	43.7
	Minimum	19	17	11	13	15	29	35	28	28	32	18	19	15	20	21	27	23	26	29	13	18	15	13	8	28	35	34	33	....	....	....	22.2
Moorestown No. 2	Maximum	30	32	36	36	38	38	49	47	47	39	32	30	33	40	45	45	50	58	58	26	29	42	30	42	53	41	51	40	....	....	....	40.6
	Minimum	20	19	18	13	16	30	34	29	30	25	19	18	16	20	23	28	25	30	28	14	18	16	14	9	28	36	35	34	....	....	....	23.0
Pleasantville§§	Maximum	32	34	38	34	40	54	51	47	54	43	29	32	30	36	49	43	52	58	55	32	36	45	33	42	53	57	53	40	....	....	....	42.9
	Minimum	12	13	11	15	10	22	37	26	29	36	14	15	11	28	20	22	19	28	24	19	18	16	16	8	22	34	37	37	....	....	....	21.4
Runyon	Maximum	32	38	39	39	39	44	52	48	48	45	34	33	40	42	44	48	54	57	54	39	32	40	40	42	54	48	46	44	....	....	....	43.4
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	30	34	35	37	38	37	47	49	49	41	36	28	33	42	46	48	49	58	53	27	31	44	29	43	56	41	52	43	....	....	....	41.8
	Minimum	21	20	19	18	18	30	36	32	34	26	21	18	17	21	23	30	29	33	24	14	17	20	14	16	32	35	36	34	....	....	....	24.6
Tuckerton	Maximum	34	36	40	40	43	44	52	48	52	50	39	33	36	39	48	48	53	60	55	48	36	47	46	42	56	52	53	52	....	....	....	45.8
	Minimum	16	17	13	12	15	33	38	26	30	35	16	15	13	28	21	30	24	31	28	15	22	20	15	11	28	39	36	35	....	....	....	23.6
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia	Maximum	32	33	37	37	40	40	49	47	47	43	35	32	36	41	47	48	51	58	56	28	32	43	33	45	56	45	53	46	....	....	....	41.4
	Minimum	23	21	21	21	23	32	38	35	37	29	25	21	21	25	26	36	36	36	27	17	20	25	18	23	33	39	38	37	....	....	....	25.9
The Sea Coast.																																	
Asbury Park	Maximum	32	35	39	33	37	39	51	45	48	44	34	30	33	38	44	41	57	55	49	33	35	42	37	38	52	42	50	47	....	....	....	41.4
	Minimum	21	21	17	18	21	33	38	30	33	30	21	19	18	28	24	34	28	29	31	17	23	20	16	16	33	36	36	35	....	....	....	25.9
Atlantic City	Maximum	32	35	39	33	39	43	52	42	49	46	30	32	35	35	42	43	49	48	47	33	39	45	36	42	51	53	50	48	....	....	....	41.7
	Minimum	20	19	19	18	22	37	36	30	37	28	24	20	21	30	26	35	32	38	33	18	27	30	19	24	34	40	39	36	....	....	....	28.3
Cape May City	Maximum	32	33	34	38	41	46	50	45	48	44	31	33	37	41	44	41	50	50	49	36	39	45	34	44	56	53	52	44	....	....	....	42.5
	Minimum	22	21	20	17	20	34	36	33	35	27	22	22	19	30	29	33	28	36	34	21	26	31	20	19	34	42	41	36	....	....	....	28.1
Long Branch	Maximum	28	33	37	33	34	38	46	42	47	40	33	29	30	35	42	42	48	60	41	29	34	42	31	42	52	41	50	41	....	....	....	39.3
	Minimum	19	20	16	16	19	31	31	28	32	30	22	20	18	27	23	31	27	33	29	18	24	21	18	8	31	36	35	35	....	....	....	24.9
Sandy Hook	Maximum	29	33	36	32	34	38	47	43	42	38	33	28	30	35	41	41	47	52	40	26	32	40	30	37	50	39	46	40	....	....	....	37.8
	Minimum	23	22	21	22	24	32	36	33	33	28	24	22	21	26	27	33	30	35	26	19	21	24	17	21	32	35	35	34	....	....	....	27.0

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	****
	Wind movement	163	155	61	58	65	101	98	66	94	74	47	42	65	35	51	24	64	52	127	98	118	60	57	82	76	96	41	74	....	....	....	2,144
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	****
	Wind movement	65	34	27	18	28	80	104	12	14	36	32	30	49	28	22	34	23	31	32	66	45	49	74	68	32	34	55	50	....	....	....	1,174

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. **** Pan frozen.

51.05
YNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. MARCH, 1929. No. 3

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Only three warmer months of March appear in New Jersey records. The latest of these, and the warmest of all, was March of 1921, with a mean temperature of 49.1°. Six consecutive months have now passed in which the monthly mean temperature for the State has been above normal. This month's mean temperature of 44.9° was 13.3° higher than the mean of the month immediately preceding. The highest temperatures occurred generally on the 22d; the lowest, on the 10th, following and vindicating a cold wave warning promulgated on the 9th, with minima in the northern part of the State running from 5 to 10 degrees above zero.

Precipitation was ample, though considerably below normal, and considerably less than occurred in February. Snowfall was light, averaging less than an inch. Only two small areas in the northern part of the State had monthly totals exceeding the normal amounts. And two small areas, one centering about Hightstown in the central portion, and the other in southern Sussex County in the north, recorded monthly totals of less than 2.00 inches of precipitation.

No destruction by windstorms was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 36 stations, was 44.9°, which was 6.4° above normal. The highest temperature was 81° at Pleasantville on the 22d, and the lowest, 5°, at Culvers Lake on the 10th. The greatest daily range of temperature was 47° at Layton on the 12th. The highest monthly mean temperature was 48.0° at Burlington, and the lowest, 40.4° at Layton.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +3.5°; Red Sandstone Plain, +3.0°; Southern Interior, +3.4°; Sea Coast, +2.9.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 3.07 inches, which was 0.84 inch below normal. The average total snowfall at 19 selected stations was 0.7 inch. The greatest monthly precipitation was 4.92 inches, at Chatham, and the least, 1.92 inches at Hightstown. The greatest amount of precipitation in any 24 consecutive hours was 1.68 inches at Elizabeth and Jersey City on the 22-23d. The mean of the number of days on which 0.01 inch or more of precipitation fell was 11, or the normal number.

The precipitation accumulated departure from the normal for the year 1929, to date, by sections, is: The Highlands, —0.94 inch; Red Sandstone Plain, —0.47 inch; Southern Interior, —0.21 inch; Sea Coast, —0.71 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 52 miles per hour from the west at Atlantic City on the 7th. High winds prevailed generally on the 2d, 5th, to 9th, inclusive, 16th, 17th, and 28th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 15, which was 3 more than normal; partly cloudy, 6, or 3 less than normal; cloudy, 10, or the normal number. The per cent of possible sunshine was 58, which was 3 per cent below normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 29.96 inches, which was 0.05 inch below normal. The highest reading was 30.53 inches on the 10th at Atlantic City. The lowest readings at all stations reporting occurred on the 5th and each reading was 29.00 inches or less, the lowest reading reported was 28.90 inches at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 7.4 feet. The river was high from the 15th to the 18th, inclusive, with a maximum stage of 14.0 feet on the 16th. The mean stage at Trenton was 4.0 feet, or 0.1 foot below normal. The highest reading was 9.0 feet on the 16th, only three feet below flood stage.

Dense fog occurred at various stations on the 5th, 14th, 15th, 16th, 23d, 24th, 25th, 26th, and 31st. Sleet occurred at a few stations on the 1st, 2d, 5th, 6th, and 11th. Light hail, which resulted in no damage, fell on the 2d at Trenton, on the 5th at Bayonne, and on the 6th at Lakewood. Scattered thunderstorms were noted on the 16th, 23d, 24th, 25th, 28th, and 30th. An aurora was observed on the 11-12th at Sandy Hook and Trenton, and on the 12th at Layton and Newton.

COMPARATIVE DATA FOR MARCH

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	*30.4*	66	2	*1.10*	2.29	*0.23*	......	......	......	......	......
1886	37.7	70	9	3.70	5.27	2.59	......	......	......	......	......
1887	37.7	*61*	8	3.34	5.45	2.19	......	......	......	13	10
1888	32.8	72	0	5.71	8.22	3.75	......	......	......	12	11
1889	40.5	67	19	3.79	6.49	1.98	......	......	......	13	8
1890	37.6	78	0	6.08	7.92	4.14	......	......	......	13	14
1891	37.2	68	4	5.06	8.02	2.05	......	8	10	13	12
1892	34.4	64	6	4.75	7.21	3.11	......	10	12	9	9
1893	37.0	68	6	3.73	6.26	2.36	.....	10	10	11	10
1894	44.2	83	12	1.77	2.65	1.09	.....	12	11	8	10
1895	36.7	72	7	3.16	4.66	1.77	4.0	12	8	11	10
1896	34.0	69	−8	5.34	7.38	3.14	13.2	13	8	10	11
1897	40.0	77	18	2.78	4.32	1.55	1.6	11	9	11	10
1898	45.1	77	16	3.33	4.25	2.56	3.0	9	10	12	12
1899	38.6	73	13	6.54	9.58	3.45	5.4	7	10	14	13
1900	35.6	67	−9	3.51	4.96	2.48	7.0	12	12	7	10
1901	39.2	75	−8	4.64	8.07	2.40	0.9	9	10	12	12
1902	43.9	77	0	4.34	7.20	3.16	5.7	12	10	9	11
1903	47.6	79	13	5.13	8.53	3.60	*0*	11	8	12	10
1904	37.2	72	1	3.43	4.76	2.02	4.5	11	8	12	13
1905	39.8	87	−7	3.95	5.06	2.80	2.6	14	8	9	12
1906	34.4	62	*−15*	5.09	6.77	2.91	11.2	10	9	12	11
1907	41.2	88	−11	3.04	4.38	1.81	11.5	13	10	8	10
1908	41.8	89	7	2.80	4.92	1.06	3.5	11	9	11	12
1909	38.3	74	−6	3.48	4.66	2.31	4.6	12	10	9	13
1910	44.5	88	10	1.22	2.36	0.29	1.1	14	10	7	6
1911	37.6	76	3	3.38	4.50	2.64	5.3	10	12	9	11
1912	36.9	72	3	**7.61**	**9.61**	**5.95**	6.6	9	11	11	14
1913	44.8	79	1	5.15	7.73	2.47	0.1	10	9	12	12
1914	35.4	75	−6	3.65	6.45	2.02	**20.5**	13	10	8	10
1915	36.1	63	11	1.13	*1.65*	0.58	7.4	20	7	4	3
1916	31.7	71	−7	3.48	4.96	2.38	19.3	13	8	10	12
1917	38.2	72	0	4.65	7.14	2.28	9.8	12	8	11	13
1918	41.8	82	8	2.06	3.76	0.99	0.7	17	7	7	9
1919	43.2	77	12	5.32	7.40	3.77	1.6	14	7	10	13
1920	39.4	79	−8	3.80	5.36	2.29	5.6	17	5	9	10
1921	**49.1**	**92**	11	3.03	4.65	1.80	T.	14	10	7	11
1922	41.1	82	2	4.52	7.10	3.42	3.7	12	6	13	13
1923	38.0	81	−3	4.09	6.73	2.13	6.3	17	6	8	10
1924	38.8	76	5	2.51	5.69	0.80	2.7	16	6	9	8
1925	43.3	80	1	3.47	6.09	1.50	0.3	16	6	9	9
1926	35.1	79	0	2.25	3.15	1.52	0.4	16	9	6	7
1927	41.9	81	9	1.46	2.73	0.78	0.3	14	7	10	10
1928	38.3	82	6	2.84	3.82	1.70	4.9	14	8	9	10
1929	44.9	81	5	3.07	4.92	1.92	0.7	15	6	10	11

W. B. O. Philadelphia-4-22-29-830.

Climatological Data for March, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	44.2	+6.1	78	22	9	10	42	2.65	−1.20	0.83	1.0	10	16	4	11	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	42.6	+6.8	75	22	7	10	45	2.76	−1.44	0.72	4.0	12	1	7	23	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	5	10	....	2.28	−1.19	0.67	9.7	12[a]	14	8	9	nw.	Brice E. Riker.
Dover	Morris	600	45	43.0[a]	+7.8	76[a]	22	8	10	43[a]	2.61	−1.38	0.91	3.0	11	8	16	7	......	William C. Harris
Layton	Sussex	480	28	40.4	+4.8	78	22	6	8	47	3.56	+0.19	1.32	9.5	9	11	8	12	sw.	A. M. Depue.
Newton	Sussex	769	45	43.3	+7.8	76	22	6	10	35	1.94	−1.63	0.85	5.5	7	9	7	15	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	43.6	+5.5	76	22	11	10	40	2.16	−1.38	0.77	1.0	9	18	3	10	......	Town Engineer.
Sussex	Sussex	442	34	42.4[b]	+6.1	77[b]	22	8[b]	10	46[b]	2.52	−1.07	0.71	T.	11	14	8	9	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	42.8	+6.4	78	22	5	10	47	2.56	−1.14	1.32	4.2	10	11	8	12	nw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	43.4[c]	+3.9	66[e]	24	16[d]	9	26[e]	4.19	+0.19	1.55	T.	11	18	3	10	w.	William Mann.
Boonton	Morris	400	§39	41.4	+4.8	73	22	9	10	43	2.77	−1.17	0.79	......	11	20	0	11	sw.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	4.92	+0.88	1.21	0	12	18	2	11	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	45.4	+6.6	79	22	10	10	40	4.38	+0.16	1.68	T.	14	18	4	9	w.	Union County Park Com.
Flemington	Hunterdon	140	§43	45.2	+5.1	80	22	10	10	44	3.04	−0.85	0.62	T.	14	20	2	9	nw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Jersey City	Hudson	10	31	45.7	+6.5	77	22	12	10	31	3.67	−0.48	1.68	0.3	10	14	9	8	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	44.6	+5.2	76	22	9	10	33	2.60	−1.43	0.97	T.	13	17	2	12	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	43.2	+5.2	78	22	11	10	44	3.53	−0.06	0.95	0	11	17	7	7	nw.	Passaic Consolid Water Co.
New Brunswick	Middlesex	110	76	45.7	+6.9	78	22	10	10	38	2.22	−1.59	0.84	T.	10	16	6	9	w.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	......	......	......	......	....	3.47	......	0.96	......	13	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	46.4	+7.6	79	22	10	10	39	3.53	−0.85	1.15	T.	11	19	3	9	nw.	Marion T. Probert.
Plainfield	Union	120	41	44.1	+5.3	78	22	9	10	42	3.55	−0.72	1.21	T.	13	15	7	9	nw.	E. D. Pearson.
Ridgefield	Bergen	80	12	44.6	......	77	22	13	10	34	3.84	......	1.30	0.3	11	13	8	10	nw.	George P. Kirsten.
Somerville	Somerset	70	46	44.9	+6.7	79	22	10	10	43	3.40	−0.56	1.10	0	11	20	3	8	w.	Arthur Gerlich.
South Orange	Essex	200	57	45.3	+8.2	79	22	10	10	43	3.07	−0.79	0.81	T.	11	14	6	11	w.	Everett W. Bird.
Verona	Essex	490	3	42.8	......	75	22	9	10	31	3.97	......	1.05	1.8	13	11	7	13	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	3.77	......	1.04	......	13	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	44.8	+7.1	75	22	12	10	28	3.51	−0.13	1.48	0.3	12	10	12	9	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	44.5	+6.0	80	22	9	10	44	3.52	−0.56	1.68	0.2	12	17	4	10	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	......	......	79[h]	22†	9[h]	10	38[h]	§	......	......	......	....	....	....	....	......	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	48.0	+7.6	78	24	12	10	35	2.34	−1.37	0.82	T.	9	16	3	12	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	46.0	+5.6	79	22	10	10	43	1.92	−2.12	0.60	0	9	14	9	8	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	47.9	+7.4	80	22	10	10	36	4.01	−0.02	1.32	0	11	14	9	8	sw.	James M. Armstrong.
Lakewood	Ocean	54	25	46.0	+6.4	78	22	11	10	38	3.25	−0.73	1.08	T.	10	13	5	13	w.	R. W. Holman.
Moorestown	Burlington	75	66	47.6	+8.4	79	22	11	10	35	2.51	−1.25	1.03	0	10	16	7	8	nw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	46.8	......	78	22	11	10	34	2.47	......	0.78	T.	10	13	5	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	2.92	−0.57	1.43	0	11	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	46.7	......	81	22	8	10	42	2.93	−0.54	0.99	......	9	20	4	7	w.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	44.6	......	77	22	9	10	46	2.40	......	0.84	......	10	19	7	5	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	46.0	+6.9	77	22	11	10	30	2.34	−1.06	0.97	T.	12	12	7	12	sw.	U. S. Weather Bureau
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	2.60	......	0.79	T.	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	47.5	+7.5	80	22	13	10	36	3.10	−1.15	1.40	0	14	14	5	12	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa.	......	117	58	48.4	+7.6	73	22	14	10	30	2.22	−1.17	0.92	T.	10	10	9	12	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	46.7	+7.1	81	22	8	10	46	2.73	−0.98	1.43	T.	10	15	6	10	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	44.8	+5.8	80	22	12	10	37	3.88	−0.35	1.26	T.	10	19	7	5	nw.	Information Bureau.
Atlantic City	Atlantic	15	56	45.9	+7.3	79	22	13	10	34	3.25	−0.35	1.45	T.	12	13	7	11	sw.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	46.6	+5.8	78	24	15	10	33	3.14	−0.59	1.26	T.	13	13	7	11	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	45.2	+6.7	78	22	11	10	32	3.22	−1.12	0.76	T.	13	13	7	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	31	43.5	+6.5	74	22	14	10	26	2.38	−1.66	1.00	T.	15	9	12	10	nw.	U. S. Weather Bureau
Means and extremes	......	......	....	45.2	+6.4	80	22	11	10	37	3.17	−0.81	1.45	T.	13	13	8	10	nw.	
For the State	......	......	....	44.9	+6.4	81	22	5	10	47	3.07	−0.84	1.68	0.7	11	15	6	10	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. ‡‡ Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville; * Formerly called Bergen Point; Highwood is Englewood; Indian Mills is Atsion; New Milford and Woodcliff Lake are Union City; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for March, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		.83		.11	.70	.39			T.				T.	.28	.06	.12							.07		T.	.02				.07		2'65
Charlotteburg	Passaic		.67	.05	.03	.50	.70			.01					.40	.15	.04							.07		.02	.02				.10		2.76
Culvers Lake	Delaware	.02	.50		.02	.67	.30	T.		T.				.01	.55	.08	.04							.03		.01	T.				.05		2.28
Dover	Passaic		.68		*	.91	.29							*	.41	.04								.10		*	.04				.14		2.61
Layton	Delaware	.01	1.32		.11	.84	.40			T.				.04	.61	.03								T.			T.				.20	T.	3.56
Newton	Delaware		.85		.03	.47	.21	T.						.03	.27		T.							T.	T.	T.	T.				.08		1.94
Phillipsburg	...do		.63		.23	.77	.09							.06	.16	T.	T.						.04	.05		T.	T.	T.			.13		2.16
Sussex	Hudson		.25	.03	.18	.71	.38								.47	.21	.03								.07		.02				.17		2.52
The Red Sandstone Plain.																																	
Bayonne	Coast		.55			1.40			T.						.30	.07							.35	1.20		.05	.08		.02		.15	.02	4.19
Boonton ‖‖	Passaic	.10		.62		.36	.79								.34	.29	.05							.06	.03		.03		T.			.10	2.77
Chatham ‖	...do	.32		.69		.59	1.21				T.				.42	.09	.07	T.						.26	.72		.04	.05			.16	T.	4.92
Elizabeth	Coast	..	.45	.10	.11	.82	.59								.32	.05	.03							1.68	.02	.04	.04				.13	T.	4.38
Flemington	Raritan	.02	.58		.16	.62	.44							T	.26	.04	.08							.55	.02	.02	.09		.05		.11		3.04
Highwood	Hackensack																																
Jersey City	Coast		.30		.20	.85	.19	T.		T.				T.	.30	.02	.01						T.	1.68		.02	T.		T.		.10		3.67
Lambertville	Delaware	.02	.50		.25	.97	.09	T.						T.	.19		.09							.17		*	.13		.04		.14	01	2.60
Little Falls ‖‖	Passaic	.09		.92		.47	.95								.28	.30	.05							.14	.12		.04	.03				.14	3.53
New Brunswick	Raritan		.34	T.	.12	.84	.43	T.							.11	.02	T.							.17	T.	.01	.08	T.	T.		.10	T.	2.22
New Milford.**	Hackensack		.88	.04	.33	.96	.05							.19	.51		.02						.01	.34		.01	.02		.11				3.47
Paterson	Passaic		1.03	.12	11	.62	.60	T.		T.				T.	.50	.12	.02							.21		.04	.03				.13		3.53
Plainfield	Raritan		.42		*	*	1.39			T.				*	.36	.01	.01						.01	1.20		.02	.01				.12		3.55
Ridgefield**	Hackensack		.70		.28	1.02	.07			T.					.59	.02							.02	.90		.04	.05				.15		3.84
Somerville	Raritan		.49		.14	.61	.68								.19	.01	.02							1.10		.01	.04				.11		3.40
South Orange	Rahway	T.	.54	.02	.08	.50	.49								.32	.06								.81		.06	.04				.15	T.	3.07
Verona**	Passaic		.74		.26	1.05	.09							.12	.60	.03	.04						.06	.77		.04	.02		T.		.15		3.97
Woodcliff Lake**	Hackensack		1.04		.38	.71	.12							.30	.54	.15	.05						.11	.05		.11	.09				.12		3.77
New York, N. Y***	Coast		.28		.40	.83	.02	T.		T.				.10	.24	.02	.01						.07	1.41		.02	T.		T.		.11		3.51
The Southern Interior.																																	
Belleplain	Tuckahoe														.18	.52	.08								.32		.12		T.			.06	§
Bridgeton	Coast																																
Burlington	Delaware		.47	T	.11	.82	.45			T					.10	T.	02							.12			.21	T.			.04		2.34
Clayton	Delaware																																
Hightstown	Raritan		.22		.20	.60	.34								.05	T.								.22		T.	.15		.06		.08	T.	1.92
Indian Mills	Mullica	.53		.10	.35	1.32	.58							T.	.18	.33	.13						T.	.28			.14				.07		4.01
Lakewood	Metedeconk		.40		.25	1.08	.58			T.					.17	.24	.04							.15		T.	.22		.12				3.25
Moorestown	Delaware		.40		.10	1 03	.43								.09	.02	.05							.13			.23				.03		2.51
Moorestown No. 2	Delaware			.39		.78	.70		T.						.11	T.	.06	.03						.07	.05			.24	T.			.04	2.47
Northfield	Coast		.12		.07	1.43	.17			T.					.17	.57	.04							.20	.03		.07		T.		.05		2.92
Pleasantville ‖‖	Coast	.07	.02			.63	.99								.18	.04	.54	.04						.06	.17			.07				.12	2.93
Runyon	Coast		.52		.20	.84	.32								.16	.07								.10		.08	.04				.07		2.40
Trenton***	Delaware		.45		.56	.75	.05	T		T.				.08	.06	.05	.03						.05	.07		T.	.14		T.		.05		2'34
Trenton No. 2‖‖	Delaware	.06	T.	.45		.79	.61		T.		T.				.15	T.	.07	T.					T.	.10	.13		T.	.16	T.	T.		.08	2.60
Tuckerton	Coast		.12		.02	1.40	.42								.12	.62	.02							.10	.10	.02		.06	.05		.04	.01	3.10
Vineland	Maurice																																
Phila., Pa***	Delaware		.41		.56	.79	.04	T.						.05	.05	.03	T.						T.	.08			.19		T.		.02		2.22
The Sea Coast.																																	
sbury Park	Coast		.32		.26	1.12	.31	T.		T.					.14	.16	.03						T.	1.26	T.	T.	.20				.08		3.88
tlantic City***	...do		.12		.36	1.27	.06	T.		T.				.19	.01	.59	.06						T.	.34		T.	.12		.05		.08	T.	3.25
ape May City	...do		.16		.06	1.26	.05							.10	.03	60	.02							.71	.03		.06		T		.05	.01	3.14
ong Branch	...do.		.60		.60	.76		T.		.01				T.	.01	.29	.03						.10	.35		.07	.30		.03		.07		3.22
andy Hook***	...do		.36		.50	.86	.11	T.		T.				.04	.11	.08	.02						.05	.03	.01	.01	.08		.01		.08		2.38

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	29.98	30.53	10	28.93	5	18.4	52	w.	7	76	62	75	55
ong Branch	29 98	30.50	10	28.90	5					74	58	66	
ooreston No. 2										79	57	69	
ew York, N. Y	29.95	30.46	10	28.99	5	17.7	60	nw.	7	70	53	61	63
hiladelphia, Pa	29.98	30.52	10	28.97	5	14.3	48	nw.	7	77	62	68	64
idgefield	29.95	30.45	10	29.00	7								
andy Hook	29.94	30.48	10	28.96	5	14.4	51	w.	7	78	64	74	62
renton	29.96	30.49	10	28.96	5	11.1	43	nw.	7	72	55	64	62
erona	29.96	30.43	10	28.99	5	10.0	38	w.	7	68	48	61	54

Daily Temperatures for March, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	48	39	48	43	40	49	42	35	40	40	58	66	68	63	61	64	50	55	66	58	68	78	68	68	57	56	61	59	61	58	66	55.9
	Minimum	27	30	25	25	37	30	23	16	20	9	28	24	31	47	42	44	27	26	26	30	28	45	50	53	39	45	33	36	34	36	39	32.4
Charlotteburg	Maximum	43	42	44	42	42	43	40	28	40	40	54	66	69	63	60	63	53	52	62	62	56	75	72	62	60	57	55	57	56	56	62	54.1
	Minimum	23	30	30	22	37	27	22	13	17	7	29	21	45	43	41	42	23	25	21	33	24	50	52	52	34	42	32	38	33	25	30	31.1
Dover	Maximum	48	38	46	44	43	46	....	31	40	39	56	67	69	55	57	63	52	52	63	59	65	76	67	66	57	56	57	60	60	48	62	54.7^{a}
	Minimum	36	27	26	26	34	29	21	14	11	8	29	24	40	40	42	34	25	26	24	36	27	53	51	39	38	40	32	39	34	29	38	31.4
Layton	Maximum	48	35	42	46	38	46	42	28	37	39	56	67	69	50	58	63	42	53	64	60	64	78	72	63	45	53	57	58	60	43	65	52.9
	Minimum	29	24	19	20	34	28	22	6	12	7	29	20	29	43	36	36	23	25	24	30	25	41	47	40	31	39	27	30	29	26	36	28.0
Newton	Maximum	45	42	43	44	39	45	38	28	38	36	55	66	69	58	59	62	47	52	65	58	65	76	68	74	64	55	56	61	58	50	64	54.2
	Minimum	28	28	23	27	29	27	20	13	17	6	28	34	42	47	43	45	23	25	32	38	30	52	34	52	50	41	30	38	31	33	38	32.4
Phillipsburg	Maximum	41	38	46	43	42	46	43	34	41	40	56	65	69	63	61	62	44	55	64	59	67	76	69	68	58	48	59	61	61	46	66	54.5
	Minimum	29	29	27	29	37	33	24	19	16	11	30	25	32	48	44	40	29	28	27	32	30	47	31	47	41	41	38	33	36	38	40	32.6
Sussex	Maximum	....	47	44	43	39	46	42	30	37	39	56	68	70	59	60	63	52	53	64	60	65	77	70	67	54	52	55	56	....	58	65	54.9^{b}
	Minimum	....	23	24	21	36	29	22	15	20	8	26	22	32	46	37	42	24	25	22	31	25	47	47	47	35	43	27	30	....	26	37	30.0^{b}
The Red Sandstone Plain.																																	
Bayonne	Maximum	45	44	49	52	46	50	38	33	42	....	53	....	....	56	55	63	42	56	60	62	60	....	65	66	48	....	59	58	56	46	62	52.5^{e}
	Minimum	30	30	32	35	30	32	22	17	16	....	30	30	....	39	40	42	30	32	38	42	40	....	44	45	39	....	40	40	38	28	42	34.2^{d}
Boonton§§	Maximum	45	43	47	46	45	49	38	31	45	39	55	65	69	52	56	63	41	53	62	59	65	73	62	65	50	58	56	61	59	48	63	53.6
	Minimum	26	24	24	23	27	30	29	15	17	9	12	22	34	42	36	41	26	25	24	30	26	34	48	44	36	40	30	31	35	27	34	29.1
Elizabeth	Maximum	42	43	49	51	45	50	45	34	45	40	57	67	70	64	52	67	55	56	63	65	69	79	75	68	61	60	60	62	58	54	62	57.0
	Minimum	29	28	29	26	40	32	25	18	23	10	31	27	40	45	40	44	28	26	28	35	29	49	50	50	41	44	35	38	37	33	39	33.8
Flemington	Maximum	51	45	50	47	44	51	44	38	43	42	62	69	68	65	53	66	55	59	62	62	67	80	71	72	61	60	63	62	64	53	63	57.8
	Minimum	28	28	28	25	38	31	24	17	21	10	28	25	33	48	39	44	28	26	26	32	28	49	51	55	41	44	33	33	35	32	35	32.7
Highwood	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Maximum	46	44	49	50	47	49	48	35	42	40	56	67	69	61	56	65	43	55	62	61	64	77	64	69	49	61	58	58	57	51	61	55.3
	Minimum	32	31	31	33	33	32	25	18	18	12	32	36	46	47	43	37	28	29	37	43	39	57	50	50	39	43	38	41	38	41	40	36.1
Lambertville	Maximum	46	41	46	47	43	45	44	33	42	39	56	66	66	65	55	62	50	54	59	60	65	76	69	70	54	61	57	58	58	48	64	54.8
	Minimum	29	31	27	28	37	31	23	17	11	9	28	33	42	51	45	44	27	27	31	40	33	52	52	54	39	46	34	39	34	36	38	34.5
Little Falls§§	Maximum	44	44	50	46	42	45	39	35	41	40	55	68	67	52	53	64	41	54	61	56	67	78	65	66	56	54	58	54	54	57	64	53.9
	Minimum	28	26	26	21	24	32	34	18	20	11	32	24	36	47	40	43	16	29	27	37	29	48	49	46	40	42	35	41	36	31	37	32.4
New Brunswick	Maximum	46	44	49	50	44	48	51	32	44	40	57	67	68	63	48	66	54	55	61	62	68	78	74	70	64	62	57	61	59	54	59	56.6
	Minimum	29	29	28	27	40	32	26	18	24	10	32	34	42	46	40	42	29	28	32	40	30	54	49	58	41	42	33	39	37	33	36	34.8
Paterson	Maximum	45	42	50	49	44	48	45	34	43	40	57	69	73	63	54	66	53	55	65	64	69	79	72	68	63	59	57	62	66	52	64	57.1
	Minimum	31	31	30	37	42	33	26	19	22	10	32	30	40	45	42	44	29	28	33	42	34	51	50	48	41	45	37	41	36	35	40	35.6
Plainfield	Maximum	47	45	49	50	47	49	48	35	43	40	57	67	69	60	56	65	43	55	63	61	68	78	60	70	49	60	58	57	57	48	62	55.4
	Minimum	29	28	26	24	39	30	25	17	17	9	30	25	41	52	40	41	27	26	26	34	27	47	49	50	40	45	38	38	32	29	37	32.8
Ridgefield	Maximum	46	43	50	50	45	49	45	34	44	41	58	70	72	56	52	67	43	56	63	63	67	77	53	65	46	56	57	60	57	48	63	54.7
	Minimum	29	32	30	32	34	33	26	20	15	13	33	36	46	42	42	36	29	29	35	41	33	51	46	46	40	41	36	38	34	38	38	34.6
Somerville	Maximum	47	42	49	48	44	48	43	34	46	41	57	68	69	64	54	65	52	55	63	62	68	79	73	71	61	59	59	62	60	53	62	56.7
	Minimum	27	31	27	26	40	31	26	17	24	10	29	25	37	50	39	44	27	26	24	33	25	50	51	50	41	44	32	35	33	35	36	33.1
South Orange	Maximum	47	45	50	49	45	49	45	33	45	41	58	69	73	65	54	67	56	57	65	64	70	79	75	68	54	59	59	62	60	50	62	57.3
	Minimum	27	28	27	27	41	31	27	17	22	10	32	26	38	43	42	43	27	25	28	35	29	48	49	51	40	44	34	37	33	32	38	33.3
Verona	Maximum	42	41	45	48	42	44	42	29	41	37	54	65	69	58	53	64	39	52	62	60	65	75	61	62	44	57	64	49	54	46	60	52.4
	Minimum	28	30	28	30	32	30	22	16	11	9	31	35	48	42	42	35	26	27	35	37	34	54	48	40	38	41	35	39	35	37	37	33.3
New York, N. Y.	Maximum	47	44	48	50	47	49	47	34	41	39	54	64	66	58	55	62	40	55	59	60	61	75	64	64	48	59	57	57	55	48	60	53.8
	Minimum	32	32	31	34	33	32	25	18	13	12	32	38	47	43	43	37	28	29	37	43	40	58	50	40	39	43	38	41	38	41	40	35.7
The Southern Interior.																																	
Belleplain	Maximum	....	....	....	....	....	....	....	...	49	38	60	67	69	70	64	68	54	55	60	67	64	79	70	79	66	79	60	62	59	48	61	......
	Minimum	....	....	....	....	....	....	....	....	23	9	22	36	42	51	55	49	32	28	38	43	29	54	58	53	44	51	36	42	29	36	42	......
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	50	48	49	50	46	49	47	37	45	39	58	67	68	70	69	63	55	56	61	60	67	76	74	78	73	69	59	60	58	57	65	58.8
	Minimum	32	31	29	31	42	35	27	20	27	12	31	33	42	54	46	45	31	33	29	40	32	56	56	58	42	46	39	41	33	40	42	37.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	49	45	50	52	45	48	44	35	40	40	58	66	67	70	68	67	55	57	64	63	69	79	74	72	60	65	60	60	62	52	54	57.7
	Minimum	28	27	27	26	38	32	24	17	24	10	28	32	43	51	41	44	28	26	33	40	26	54	50	54	40	44	34	38	29	35	39	34.3
Indian Mills	Maximum	50	46	51	53	49	58	50	34	47	39	60	68	71	72	67	67	53	57	64	66	68	80	74	75	59	76	58	62	56	49	66	59.5
	Minimum	29	30	26	28	42	34	28	20	22	10	27	32	43	53	55	48	30	28	30	38	33	54	63	55	41	46	36	38	30	34	43	36.3
Lakewood	Maximum	46	46	49	52	47	47	49	34	41	37	55	66	69	71	63	65	52	54	64	64	65	78	76	71	50	70	57	62	58	51	58	57.0
	Minimum	31	27	29	28	42	32	26	19	22	11	27	28	46	50	44	43	31	28	27	40	29	53	55	50	41	46	36	40	32	32	42	35.1
Moorestown	Maximum	51	45	51	56	52	51	50	39	44	40	54	68	68	70	68	66	50	58	63	64	64	79	78	78	58	73	61	61	63	53	59	59.2
	Minimum	27	28	28	21	40	32	27	17	23	11	28	34	44	54	50	42	28	28	39	42	41	54	58	53	40	43	36	40	31	36	41	36.0
Moorestown No. 2	Maximum	48	46	49	50	46	50	47	34	45	39	58	67	68	71	64	66	43	57	62	63	66	78	74	76	54	71	59	61	58	45	64	57.4
	Minimum	30	32	30	29	35	33	23	19	14	11	28	35	43	54	49	40	30	30	32	43	36	60	60	42	43	44	37	41	34	40	43	36.1
Pleasantville§§	Maximum	52	50	48	50	51	52	48	40	49	39	60	68	68	63	58	69	45	56	56	68	60	81	69	78	59	78	59	63	63	49	59	58.3
	Minimum	29	33	26	35	40	34	36	21	22	8	18	35	40	45	46	45	32	27	33	42	29	47	51	52	42	45	35	43	28	28	42	35.1
Runyon	Maximum	48	46	50	54	46	50	40	35	44	40	60	67	69	67	63	68	50	63	64	68	74	77	71	70	64	66	62	58	60	54	64	58.5
	Minimum	22	24	26	20	36	32	25	18	24	9	22	27	43	42	39	40	30	24	20	24	28	34	54	41	40	42	31	32	26	42	38	30.8
Trenton	Maximum	49	45	48	52	45	48	48	34	43	38	58	66	66	69	59	63	41	56	60	59	66	77	72	72	49	66	58	58	58	48	64	56.0
	Minimum	32	33	30	32	35	33	23	18	13	11	31	36	44	46	46	38	30	30	35	43	37	59	56	42	41	45	38	41	37	40	41	36.0
Tuckerton	Maximum	50	48	48	50	50	50	50	38	42	47	60	70	70	65	58	69	64	57	56	68	65	80	79	78	58	78	68	63	60	53	58	59.7
	Minimum	28	34	26	32	40	32	35	19	18	13	24	35	38	44	48	46	32	27	36	43	33	49	53	44	40	47	33	43	30	38	34	35.3
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa	Maximum	51	46	48	48	48	49	49	37	46	42	59	66	65	69	64	66	44	58	60	62	66	78	72	75	57	71	60	61	60	46	62	57.6
	Minimum	36	36	32	35	35	35	25	21	16	14	31	39	47	55	51	42	31	32	37	45	42	60	63	47	45	50	42	45	39	42	45	39.2
The Sea Coast.																																	
Asbury Park	Maximum	47	45	47	46	46	47	50	35	43	38	57	69	70	55	45	65	48	55	56	66	52	80	74	67	48	62	56	63	54	46	55	54.4
	Minimum	31	34	30	34	39	33	25	20	18	12	29	32	41	41	40	41	30	29	34	42	39	44	46	43	41	43	38	39	36	42	43	35.1
Atlantic City	Maximum	50	48	44	47	50	50	52	37	47	37	47	60	60	51	55	66	45	55	48	67	52	79	63	78	53	72	56	62	52	48	48	54.2
	Minimum	33	35	30	39	35	35	25	22	17	13	31	41	44	45	45	44	34	32	42	45	42	46	48	44	44	48	40	42	37	44	44	37.6
Cape May City	Maximum	50	48	47	47	52	50	51	37	48	36	52	64	56	56	56	66	44	55	51	65	55	75	62	78	58	77	58	62	56	48	54	55.3
	Minimum	32	35	32	38	37	36	27	24	18	15	32	38	43	43	45	41	35	34	41	42	40	47	49	45	44	49	42	44	38	44	43	37.8
Long Branch	Maximum	48	44	46	48	44	47	48	33	40	35	52	66	68	65	48	65	42	52	56	60	57	78	73	66	48	64	58	61	58	52	57	54.2
	Minimum	32	35	31	32	35	34	24	20	15	11	30	34	58	45	44	40	30	28	33	38	32	51	51	45	44	46	40	43	38	41	44	36.3
Sandy Hook	Maximum	44	44	46	48	41	44	47	32	42	38	53	60	65	55	45	57	41	50	57	57	58	74	64	58	44	55	55	57	53	47	54	51.1
	Minimum	33	34	32	33	35	34	26	21	16	14	33	36	43	41	40	38	31	31	37	42	39	48	45	42	42	44	40	43	40	41	40	35.9

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation*	....	....	....	....	....	....	....	....	....	....	....	.224	.052	.072	.028	.168	....	....	.096	.160	.144	.156	.026	.192	....	.134	.096	.192	.160	....	....	......
	Wind movement	78	143	96	77	151	171	237	127	189	51	107	117	121	99	88	126	114	110	136	86	163	68	120	163	104	28	167	143	89	142	10	3,621 ****
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	Wind movement	50	66	62	33	28	100	227	189	102	85	54	62	68	53	30	42	130	112	116	94	66	60	68	52	46	46	50	105	60	30	39	2,329

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. **** Pan frozen.

51, 05
NJ

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. APRIL, 1929. No. 4

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

April falls into line as the seventh consecutive month with mean temperature above normal in New Jersey. It was the warmest April since 1925, and averaged nearly four degrees a day warmer than last April; it averaged also a little more than six degrees daily warmer than March, which had only a few days below normal in temperature. Of the first nine days of April all were above normal except the 2d, and that day was above normal in some sections. This period was characterized by record-breaking warmth, with daily mean temperatures running from five to thirty degrees above normal. The warmest day was the 8th, owing to high minima that day, but maximum temperatures were highest on the 7th at many stations. From the 10th to the close of the month temperatures were mostly below normal. The 2d and 24th were the coolest days.

A mean total precipitation of 6.43 inches sets a new high record for April in this State, the superceded maximum of 6.31 inches having stood since 1901 in a series of records going back to 1885. Generally the longest interval without rain was three days. There were on the average 15 days with precipitation, which is more than ever previously recorded. The number of cloudy days, 15, was equalled in 1901, but has never been exceeded.

An unusual number of destructive windstorms occurred during April. On the 1st, a violent windstorm in Warren County demolished at least two houses and a number of barns, and damaged the superstructure of a wooden bridge across the Delaware River. Several people were injured in this storm, and one man lost his life in the collapse of a farm house. High winds were felt all over the State that day. On the 10th and 11th a northeast gale raised a sea that was destructive in the vicinity of Point Pleasant Beach and Mantoloking. No one was killed or injured, so far as reports indicate, but property damage was estimated as upwards of $150,000. Five houses or bungalows were reported swept out to sea or tumbled into the surf, several others were weakened on their foundations or flattened by the wind, and a long section of the boardwalk was torn out. On the 16th high winds did much damage over the State, that in the interior cities, as at Trenton, being considerable, such as blowing roofs off houses, blowing the cross off a steeple, breaking light globes and plate glass windows, and blowing down trees or branches, and poles. In the aggregate, however, it was surpassed by the damage to farms and orchards in South Jersey, including chicken farms, where damage estimated at a quarter of a million dollars was caused. At Point Pleasant Beach, Mantoloking, and Avalon much damage was done to bungalows and other houses, adding probably at least $50,000 to the damage suffered less than a week earlier. Waves washed a large beach front drug store into the sea at Point Pleasant Beach, and a bungalow at Mantoloking, and damaged a beach hotel heavily. Two hundred feet of a concrete bulkhead at Avon-by-the-Sea was reported destroyed.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 36 stations, was 51.1°, which was 1.8° above normal. The highest temperature was 94° at Belvidere on the 8th, and the lowest, 25°, at Layton on the 24th. The greatest daily range of temperature was 49° at South Orange on the 7th. The highest monthly mean temperature was 54.2° at Burlington, and the lowest, 48.6° at Dover.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +3.0°; Red Sandstone Plain, +2.5°; Southern Interior, +3.2°; Sea Coast, +3.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 6.43 inches, which was 2.69 inches, above normal. Eight stations reported a trace of snow and only one station reported more than a trace. The greatest monthly precipitation was 8.74 inches, at Lakewood, and the least, 4.63 inches at Cape May City. The greatest amount of precipitation in any 24 consecutive hours was 4.05 inches at Lakewood on the 16th. The mean of the number of days on which 0 01 inch or more of precipitation fell was 15, or 5 more than normal.

The precipitation accumulated departure from the normal for the year 1929, to date, by sections, is: The Highlands, +1.84 inches; Red Sandstone Plain, +2.25 inches; Southern Interior, +2.64 inches; Sea Coast, +1.44 inches.

WIND.

The prevailing wind direction was from the northeast. The wind movement averaged 15 miles per hour, which was 3 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 78 miles per hour from the northeast at Atlantic City on the 16th.

SUNSHINE AND CLOUDINESS.

The average number of clear days throughout the State was 10, which was 2 less than normal; partly cloudy, 5, or 4 less than normal; cloudy, 15, or 6 more than normal. The per cent of possible sunshine was 46, which was 11 per cent below normal.

MISCELLANEOUS.

The mean atmospheric pressure, reduced to sea level, was 29.91 inches, which was 0.09 inch below normal. The highest reading was 30.43 inches on the 3d at Atlantic City and Sandy Hook, and the lowest was 28.94 inches on the 16th at Atlantic City.

The mean stage of the Delaware River at Phillipsburg was 7.3 feet, and the highest stage was 12.0 feet on the 22d. At Trenton the mean stage was 4.3 feet, or 0.4 foot above normal. The highest was 7.3 feet on the 23d.

Dense fog settled along the coast and in scattered sections of the northern portion on the 1st, 5th and 6th. Sleet occurred on the 17th at Bayonne and on the 15th at Ridgefield. Light hail, which resulted in no damage, fell at six stations on the 1st, 13th, 15th, 16th, 17th and 22d. Thunderstorms occurred at various stations on several of the following dates: 1, 4, 5, 6, 13, 21, 22, 25, 26 and 29. High winds were general on the 1st, 16th and 29th, and occurred in sections on one or more of the following dates: 2, 11, 15, 16, 17 and 25. Light frost was general in the southern portion, except the immediate coast, on the 23d, 24th and 30th. Light to heavy frost was general in the north portion on the 23d, 24th and 30th, and at some stations on the 2d, 3d, 4th and 27th. Two stations in northwestern Sussex county reported killing frost on several dates, the last date was the 24th.

COMPARATIVE DATA FOR APRIL

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	48.4	88	26	2.79	2.86	0.89					
1886	50.6	86	27	3.40	5.48	1.86	......	......	......	......	......
1887	47.3	87	16	2.70	3.77	0.91	......	......	......	......	......
1888	47.9	92	22	3.28	4.68	1.89	......	......	......	12	7
1889	51.2	83	25	5.32	7.25	2.92	......	......	......	6	9
1890	50.4	86	21	2.65	4.58	1.89	......	......	......	14	12
1891	52.0	88	20	2.19	3.80	1.39	......	......	......	7	8
1892	49.3	87	19	2.49	4.41	1.05	. . .	13	11	6	8
1893	49.2	82	19	5.21	7.12	2.97	......	9	13	8	8
1894	50.3	88	10	3.09	4.86	1.71	......	9	10	12	11
1895	49.1	89	19	4.88	7.75	3.47	......	12	9	9	9
1896	52.4	**98**	12	*1.35*	*2.30*	0.64	T.	11	7	12	10
1897	50.4	89	19	3.79	6.98	2.17	3.1	13	10	7	7
1898	47.8	*81*	13	3.74	4.94	2.17	T.	14	11	5	9
1899	49.9	88	18	1.73	3.25	*0.48*	2.9	8	11	11	11
1900	50.8	82	18	2.29	3.03	1.59	T.	16	10	4	4
1901	48.3	89	23	6.31	**10.22**	3.46	T.	14	9	7	6
1902	50.2	93	20	3.62	5.99	2.45	0	8	7	15	12
1903	50.9	92	18	3.97	7.03	2.40	0	10	11	9	9
1904	46.7	85	16	3.42	4.71	2.00	0	13	7	10	9
1905	49.9	84	18	2.88	4.03	1.53	0.1	9	12	9	10
1906	51.2	87	17	3.64	6.42	1.17	0.1	12	11	7	10
1907	*45.2*	83	19	3.78	8.67	2.06	T.	15	10	5	8
1908	51.2	93	13	2.72	3.86	1.42	4.8	11	9	10	11
1909	50.2	88	17	5.97	8.90	3.84	T.	14	9	7	11
1910	53.5	88	20	5.34	7.56	3.43	0.8	10	11	9	13
1911	47.4	88	14	4.11	5.58	2.87	0	9	11	10	12
1912	50.4	82	18	3.56	6.02	1.81	2.6	10	10	10	11
1913	52.1	89	19	5.78	8.53	4.14	0	9	10	11	14
1914	48.4	89	16	3.67	4.78	2.35	T.	14	7	9	11
1915	54.4	96	20	2.71	4.13	1.28	0	13	10	7	11
1916	48.2	85	21	3.32	6.14	0.90	**11.5**	14	10	6	9
1917	48.8	88	21	2.39	3.54	1.19	4.4	10	9	11	13
1918	49.8	*81*	22	4.05	5.79	2.88	4.7	15	8	7	9
1919	49.3	85	15	3.06	4.79	2.20	2.6	11	8	11	12
1920	48.0	85	13	4.50	6.06	2.90	T.	13	7	10	10
1921	**56.3**	87	20	3.57	5.20	1.86	T.	12	9	9	13
1922	51.0	89	18	2.55	4 12	1.57	0.4	13	6	11	11
1923	50.0	91	*3*	3.55	6.59	2.27	T.	15	7	8	10
1924	48.0	81	18	6.15	9.23	**4.74**	0.5	16	6	8	9
1925	51.4	88	15	2.40	3.35	1.31	6.6	15	6	9	11
1926	46.4	87	14	2.05	2.97	1.39	0	15	7	8	9
1927	47.5	93	17	2.42	3.97	1.00	T.	13	10	7	8
1928	47.4	85	16	5.26	7.16	3.82	0.3	14	7	9	9
1929	51.1	94	25	**6.43**	8.74	4.63	0.9	12	8	10	12

W. B. O. Philadelphia 5-23-29 830.

Climatological Data for April, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	51.4	+1.6	94	8	31	2†	41	7.15	+3.49	1.75	0	17	13	0	17	......	Miss C. S. Hixson.
Charlotteburg††	Passaic	719	37	49.2	+2.4	89	7†	27	2†	47	7.17	+2.85	1.37	0	17	0	3	27	w.	Newark Water Dept.
Culvers Lake††	Sussex	848	28	......	......	......	......	26	2	....	5.93	+2.11	1.81	1.0	18	10	6	14	e.	Brice E. Riker.
Dover	Morris	600	45	48.6	+1.2	87	7†	29	2	42	7.27	+3.51	2.02	0	15	8	6	16	......	William C. Harris
Layton	Sussex	480	28	49.1	+1.9	91	7	25	24	44	5.69	+2.08	1.90	0	15	9	3	18	ne.	A. M. Depue.
Newton	Sussex	769	45	50.0	+2.0	**90	7	**29	2	45	5.74	+2.37	1.61	T.	15	11	3	16	......	Irving J. Kern.
Phillipsburg	Warren	363	46	51.4	+1.5	89	8	32	24	38	6.90	+3.64	2.03	0	16	13	4	13	......	Town Engineer.
Sussex	Sussex	442	34	49.4^{b}	+0.8	91^{b}	7	28^{b}	2†	40^{b}	5.65	+2.21	1.55	0	16	9	4	17	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	49.9	+1.6	94	8	25	24	47	6.44	+2.78	2.03	0.1	16	9	4	17	nw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	49.6	+0.1	88	7	32	2†	40	5.69	+1.30	1.20	T.	12	9	5	16	e.	William Mann.
Boonton	Morris	400	§39	49.0	+0.3	85	7†	30	2†	37	7.30	+3.31	2.11	......	15	12	1	17	ne.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	8.07	+3.97	1.79	0	16	13	7	10	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	52.0	+1.2	91	8	31	23	47	5.99	+2.31	1.30	0	15	9	3	18	ne.	Union County Park Com.
Flemington	Hunterdon	140	§43	52.0	+1.6	90	7	32	2†	46	6.35	+2.83	1.42	0	18	13	3	14	e.	Hiram E. Deats.
Highwood††	Bergen	90	41	......	......	......	......	......	......	....	......	......	......	......	......	......	......	......	......	
Jersey City	Hudson	10	31	51.3	+1.3	90	7	33	2	45	5.85	+1.69	1.29	T.	14	8	7	15	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	51.1	+0.4	87	7†	32	2	42	5.85	+2.27	1.27	T.	19	10	4	16	e.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	49.9	0.0	89	8	31	2	45	7.60	+3.48	1.93	0	15	8	6	16	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	51.6	+2.0	90	7†	33	2	47	6.90	+3.16	1.61	0	16	11	5	14	sw.	N. J. Experiment Station
New Milford††	Bergen	9	11	......	......	......	......	......	......	....	6.34	......	1.18	0	13	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	51.6	+1.1	90	7†	32	2	45	6.75	+3.19	1.27	T.	15	14	2	14	sw.	Marion T. Probert.
Plainfield	Union	120	41	49.8	+0.2	90	7†	30	24	48	5.67	+1.77	1.63	T.	15	8	4	18	nw.	E. D. Pearson.
Ridgefield	Bergen	80	12	49.6	......	90	7	32	2	46	6.22	......	1.43	T.	15	9	5	16	uw.	George P. Kirsten.
Somerville	Somerset	70	46	51.0	+1.5	90	7†	30	23†	48	6.31	+2.82	1.33	0	14	10	6	14	w.	Arthur Gerlich.
South Orange	Essex	200	57	51.4	+2.9	91	7†	32	24	49	6.77	+3.20	1.22	0	17	8	5	17	w.	Everett W. Bird.
Verona	Essex	490	3	48.8	......	86	7†	30	2	42	8.04	......	2.18	T.	15	6	7	17	nw.	Luther Davis.
Woodcliff Lake††	Bergen	100	11	......	......	......	......	......	......	....	7.49	......	1.41	0	16	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	50.6	+1.2	86	7	32	2	40	5.76	+2.53	1.42	T.	15	5	8	17	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	50.6	+1.0	91	7†	30	2†	49	6.66	+2.72	2.18	T.	15	10	5	15	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	§	......	91^{c}	7†	30^{c}	13	38^{c}	6.04	+2.39	2.50	0	10	12	4	14	e.	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	......	......	......	......	......	Paul T. Kornman.
Burlington	Burlington	12	§43	54.2	+2.4	89	7†	34	24	41	6.22	+2.52	2.08	0	16	10	4	16	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	....	....	......	......	......	......	......	......	......	......	......	Harry P. Campbell.
Hightstown	Mercer	120	35	51.2	+0.7	91	7	30	24	45	6.66	+2.75	1.74	0	15	11	4	15	w.	Charles Welsh.
Indian Mills††	Burlington	76	40	53.8	+3.5	92	8	32	24	43	6.02	+2.59	1.32	0	15	12	6	12	ne.	James M. Armstrong.
Lakewood	Ocean	54	25	52.0	+2.6	89	7†	31	24	45	8 74	+5.07	4.05	0	16	9	6	15	ne.	R. W. Holman.
Moorestown	Burlington	75	66	53.2	+2.8	91	8	33	2	38	5.84	+2.55	2.10	0	13	11	4	15	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	52.7	......	90	7†	35	2†	40	5.79	......	1.50	0	15	10	5	15	sw.	Japanese Beetle Laboratory.
Northfield††	Atlantic	25	22	......	......	......	......	......	......	....	5.92	+2.46	2.65	0	13	....	....	....	......	William L. Flick.
Pleasantville††	Atlantic	26	§31	52.6	......	93	7	32	24	42	6.14	+2.79	2.00	......	13	17	3	10	nw.	N. J. Dept. Conservation.
Runyon††	Middlesex	18	5	51.2	......	88	7	26	24	44	7.80	......	2.36	......	14	10	11	9	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	52.2	+2.4	88	7	34	2	41	5.34	+2.40	1.48	0	16	6	6	18	ne.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	5.95	......	1.31	0	16	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	52.6	+3.3	90	7	30	23	43	6.72	+2.98	2.90	0	14	14	3	13	s.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	...	......	......	....	......	......	......	......	......	......	......	......	......	William Pfeffer.
Philadelphia, Pa	......	117	58	55.2	+3.1	90	7	37	17	35	6.44	+3.39	2.41	0	16	7	6	17	sw.	U. S. Weather Bureau.
Means and extremes	......	......	..	52.6	+2.5	93	7	26	24	45	6.40	+2.85	4.05	0	14	11	5	14	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	50 6	+2.1	88	7	35	2	43	5.30	+1.61	1.50	0	13	10	6	14	ne.	Information Bureau.
Atlantic City	Atlantic	16	56	52.4	+4.6	86	6	38	17	35	5.63	+2.64	2.31	0	15	10	7	13	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	53.0	+4.6	84	6	36	22	35	4.63	+1.74	1.41	0	14	9	8	13	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	49.8	+1.7	92	8	36	23†	45	7.84	+3.29	1.89	0	17	8	5	17	s.	William D. Martin.
Sandy Hook	Monmouth	22	31	49.4	+2.4	85	8	36	2	37	5.08	+1.46	1.40	0	18	6	6	18	ne.	U. S. Weather Bureau.
Means and extremes	......	......	....	51.0	+3.1	92	8	35	2	45	5.70	+2.15	2.31	0	15	9	6	15	ne.	
For the State	......	......	....	51.1	+1.8	94	8	25	24	49	6.43	+2.69	4.05	T.	15	10	5	15	ne.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

†† Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood: Indian Mills is Atsion: New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland. ** Estimated.

Daily Precipitation for April, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.10	....	....	.20	.26	.45	....	....	....	.37	....	1.75	....	.02	.03	1.00	.30	T.	....	.07	.43	.27	....	....	.20	.94	....	.28	.48	....	....	7.15
Charlotteburg	Passaic	.02	.09	....	.15	.19	.49	....	....	....	.39	....	1.20	....	.06	....	1.37	.45	.04	....	.04	.25	.56	....	....	.25	1.04	....	....	.58	....	....	7.17
Culvers Lake	Delaware	.20	....	....	.38	.05	.37	....	....	....	.32	....	1.81	.03	.02	.01	.71	.25	T.	....	.08	.36	.33	....	....	.41	.27	....	.25	.08	....	....	5.93
Dover	Passaic	.21	....	....	.21	.66	....	....	....	....	.36	....	1.33	....	....	*	.89	.34	.02	....	*	.42	.21	....	....	.52	1.50	....	.60	....	....	....	7.27
Layton	Delaware	.16	....	....	.18	.24	.34	....	....	....	.49	T.	1.90	....	....	.03	.65	.15	....	....	.12	.43	.18	....	....	.23	.19	....	.40	T.	....	....	5.69
Newton	Delaware	.32	....	....	.20	.30	.10	....	....	....	.94	....	1.61	.02	.04	T.	.63	.18	T.	....	T.	.46	.16	....	....	.26	.37	....	.15	T.	....	....	5.74
Phillipsburg	....do	.03	....	....	.11	.31	.24	....	....	....	.27	.05	1.58	....	....	.05	1.12	.21	....	....	.04	.36	.21	....	....	1.92	.11	....	.29	....	....	....	6.90
Sussex	Hudson	.16	....	....	.31	.09	.29	....	....	....	.35	....	1.55	....	.03	....	.94	.27	....	....	.09	.30	.39	....	....	.58	....	....	.07	.22	.01	....	5.65
The Red Sandstone Plain.																																	
Bayonne	Coast	T.	....	....	.24	.25	.45	....	....	....	.30	....	.90	T.	....	....	1.20	.20	....	....	....	.15	.70	....	....	.25	.30	....	.75	T.	....	....	5.69
Boonton ‖‖	Passaic	T.	.03	....	....	.20	.82	....	....	....	.12	.23	.80	.47	T.	....	.23	.98	.05	....	....	.10	.41	.04	....	T.	2.11	....	....	.71	....	....	7.30
Chatham ‖	....do	T.	.03	....	....	.26	.85	....	....	....	.16	.24	.62	.49	....	.09	.93	.83	.02	T.	....	.11	.58	.12	....	....	1.79	....	....	.95	....	....	8.07
Elizabeth	Coast	T.	....	....	.28	.12	.66	....	T.	T.	.25	T.	.81	T.	....	T.	1.30	.30	.01	....	.08	.23	.48	....	....	.07	.39	....	.51	.50	....	....	5.99
Flemington	Raritan	.02	....	....	.32	.34	.31	....	....	T.	.41	....	1.42	.01	.01	T.	1.19	.23	.02	....	.06	.10	.57	....	....	.17	.61	....	.23	.33	....	....	6.35
Highwood	Hackensack	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Coast	T.	....	....	.24	.04	.50	....	....	....	.31	T.	1.10	T.	T.	.02	1.29	.24	T.	....	.06	.60	.25	....	....	.10	.25	....	.85	....	....	....	5.85
Lambertville	Delaware	.22	....	....	.11	.33	.03	....	....	T.	.44	.02	1.25	....	.06	.04	1 27	.20	.04	....	.04	.69	.22	....	....	.14	.23	....	.50	.02	....	....	5.85
Little Falls ‖‖	Passaic	....	.03	....	....	.24	.59	....	....	....	.14	.30	.71	.51	....	....	.45	1.17	.01	....	....	.10	.55	.04	....	T.	1.93	....	....	.83	....	....	7.60
New Brunswick	Raritan	T.	.09	....	.27	.13	.65	....	....	....	.38	.02	.85	T.	T.	T.	1.61	.44	T.	....	.05	.41	.66	T.	....	.06	.43	....	.30	.55	T.	....	6.90
New Milford.**	Hackensack	....	....	....	.24	.26	....	....	....	....	.41	....	.83	....	....	.05	1.07	.20	....	....	.04	.34	....	.26	....	1.18	.42	....	1.04	....	....	....	6.34
Paterson	Passaic	.03	....	....	.25	.04	.42	....	....	....	.41	....	1.12	T.	T.	....	1.10	.28	....	....	.04	.10	.44	....	....	.30	1.27	....	.10	.85	....	....	6.75
Plainfield	Raritan	....	....	....	.26	.06	.60	....	....	T.	.14	T.	.90	....	.01	.02	1.63	.01	T.	....	.11	*	.54	....	....	.10	.34	....	.95	....	....	....	5.67
Ridgefield**	Hackensack	.01	....	....	.21	....	.47	....	....	....	.31	....	.84	....	....	....	.57	.68	....	....	.11	.10	.50	....	....	.16	1.27	....	....	.99	....	....	6.22
Somerville	Raritan	T.	....	....	.25	.20	.58	....	....	....	.35	....	1.23	....	....	....	1.33	.21	T.	....	.06	.50	.23	....	....	.14	.67	....	.18	.38	....	....	6.31
South Orange	Rahway	.03	....	....	.21	.15	.66	....	....	....	.39	....	.95	.02	....	....	1.22	.31	.02	....	.06	.10	.56	....	....	.22	.80	....	.74	.33	....	....	6.77
Verona**	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Woodcliff Lake**	Hackensack	.11	....	....	.30	.23	.12	....	....	....	.52	1.18	....	.03	.10	.38	1.22	.12	....	....	.14	.05	.60	....	....	1.41	....	....	.98	....	....	....	7.49
New York, N. Y***	Coast	T.	....	....	.22	.46	.14	....	....	T.	.28	.01	1.01	T.	T.	.10	1.31	.18	T.	....	.05	.60	.22	....	....	.15	.21	....	.82	....	....	....	5.76
The Southern Interior.																																	
Belleplain	Tuckahoe	T.	....	....	T.	.20	....	....	....	....	.05	....	.90	....	.18	....	2.50	.20	T.	....	....	....	.72	....	....	.80	.10	....	....	.39	....	....	6.04
Bridgeton	Coast	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Delaware	.01	.01	....	.08	.32	....	....	....	T.	.17	....	1.03	....	.10	....	2.08	.23	.03	....	....	.35	.91	....	....	.19	.06	....	.23	.42	....	....	6.22
Clayton	Delaware	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Raritan	.06	....	....	.12	.21	....	....	....	....	.42	....	.96	....	.07	.06	1.74	.35	....	....	T.	.40	.90	....	....	.08	.38	....	.30	.61	....	....	6.66
ndian Mills	Mullica	.06	....	....	.09	.40	....	....	....	T.	.24	....	1.15	....	.28	....	1.32	.22	.03	....	....	.40	.66	....	....	.11	.14	....	.68	.24	....	....	6.02
akewood	Metedeconk	.08	....	....	.08	.20	T.	....	....	T.	.16	....	1.15	....	.16	.05	4.05	.30	.04	....	T.	.65	.37	....	....	.10	.10	....	.40	.85	....	....	8.74
Moorestown	Delaware	.16	....	....	.08	.31	....	....	....	T.	.23	....	1.03	....	....	T.	2.10	.20	....	....	T.	.20	.64	....	....	.12	.10	....	.30	.37	....	....	5.84
Moorestown No. 2	Delaware	....	.13	....	....	.11	.04	....	....	....	.15	.07	.99	.01	.11	..	1.50	.94	.02	....	....	....	.83	.01	....	T.	.18	....	....	.70	....	....	5.79
orthfield	Coast	....	....	....	....	.07	....	....	....	....	.06	....	1.34	....	.22	.18	2.65	.20	....	....	....	.28	.43	....	....	.08	.07	....	.30	.04	....	....	5.92
leasantville ‖‖	Coast	....	....	....	....	.02	.09	....	....	....	.06	.04	1.34	T.	.24	....	2.00	.78	.03	....	....	....	.84	.02	....	....	.17	....	....	.51	....	....	6.14
unyon	Coast	....	....	....	.37	.11	.62	....	....	....	.36	....	.83	....	....	....	2.36	.47	....	....	.17	.32	.84	....	....	.11	.32	....	.40	.52	....	....	7.80
renton***	Delaware	.05	....	....	.08	.26	....	....	....	.01	.16	.02	.88	.02	T.	.26	1.29	.17	....	....	T.	.72	.25	....	....	.52	.06	....	.59	....	....	....	5.34
renton No. 2 ‖‖	Delaware	T.	.06	....	....	.10	.26	....	....	T.	.09	.10	.79	.16	.05	T	.64	.89	.04	....	....	.04	1.31	.05	....	....	.74	....	....	.63	....	....	5.95
uckerton	Coast	....	....	....	....	.21	....	....	....	....	.10	.02	1.13	....	.60	.01	2.90	.30	.02	....	....	....	.62	....	....	.10	.04	....	.31	.36	....	....	6.72
ineland	Maurice	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
hila., Pa***	Delaware	.11	....	....	.06	.32	....	....	....	.05	.14	.07	1 20	.10	T.	.71	1.97	.07	....	....	T.	.41	.22	....	....	.31	.07	....	.63	T.	....	....	6.44
The Sea Coast.																																	
sbury Park	Coast	T.	....	....	.10	.07	.50	....	....	....	.12	....	.68	T.	T.	.06	1.50	.26	.03	....	T.	.26	.17	....	....	.05	.20	....	1.30	....	....	....	5.30
tlantic City***	....do	T.	....	....	.01	.06	....	....	....	.06	.01	....	1.35	.21	.04	.52	1.89	.14	....	....	....	.81	.10	....	....	.06	.06	....	.31	....	....	....	5.63
ape May City	....do	....	....	....	.11	.32	.01	....	....	.01	.17	T.	.86	T.	.08	.07	1.41	.13	T.	....	....	.33	.49	....	....	.03	.35	....	.26	....	....	....	4.63
ong Branch	....do	.01	....	....	.10	.08	.51	....	....	.09	.40	.01	1 50	T.	T.	.80	1.89	.69	....	....	.07	.40	.28	....	....	.09	.16	....	.76	....	....	....	7.84
andy Hook***	....do	.02	....	....	.29	.45	.17	....	....	.02	.28	T.	1.21	.01	.01	.13	1.30	.11	....	....	.05	.30	.20	....	....	.10	.03	....	.40	....	....	....	5.08

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	29.91	30.43	3	28.94	16	20.0	78	ne.	16	74	64	75	50
ong Branch	29.92	30.40	3	28.97	17	......	......	......	......	71	64	69	......
oorestown No. 2	......	......	......	......	......	......	......	......	......	80	64	78	......
ew York, N. Y	29.90	30.41	3	29.03	17	16.4	62	nw.	1	69	61	67	46
iladelphia, Pa	29.92	30.47	3	29.00	16	14.9	50	ne.	16	76	65	70	49
dgefield	29.90	30.40	3	29.05	17	......	......	......	......	......	......	......	......
ndy Hook	29.90	30.43	3	29.02	17	16.3	60	ne.	16	79	68	78	46
enton	29.90	30.41	3	28.99	16	12.3	50	ne.	16	72	60	71	47
erona	29.92	30.41	3	....	......	10.2	40	nw.	1	70	59	67	41

Daily Temperatures for April, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	69	62	63	70	58	85	89	94	78	67	54	46	53	56	44	40	43	46	63	55	57	50	63	71	64	65	71	64	61	66	....	62.2
	Minimum	49	31	34	36	47	55	53	53	57	37	33	37	35	39	35	34	35	39	39	41	43	36	34	31	43	53	37	43	46	35	....	40.7
Charlotteburg	Maximum	64	66	61	73	61	62	89	89	86	68	50	50	44	43	41	40	42	43	56	54	60	45	58	68	65	66	68	66	65	65	....	60.3
	Minimum	44	27	29	32	49	49	42	50	56	34	32	34	33	33	33	33	33	37	36	40	42	33	31	27	35	52	38	47	44	34	....	38.0
Dover	Maximum	68	56	63	74	61	65	87	87	72	59	50	42	45	46	40	38	44	42	58	54	50	47	61	69	60	63	70	62	50	65	....	58.3
	Minimum	42	29	34	37	50	47	45	54	55	35	34	35	34	33	33	34	33	37	37	42	38	34	34	30	40	53	38	39	44	34	....	38.8
Layton	Maximum	66	52	68	71	60	88	91	89	74	63	54	45	43	56	42	40	43	44	56	52	45	53	60	69	58	62	69	62	58	67	....	60.0
	Minimum	48	27	30	32	45	51	51	48	53	35	33	35	33	37	36	33	35	37	37	37	40	35	30	25	36	55	31	45	45	31	....	38.2
Newton	Maximum	71	59	66	77	64	68	90	89	79	65	54	47	45	53	42	40	43	42	57	53	46	47	61	79	59	67	72	64	60	69	....	60.9
	Miuimum	36	29	34	37	50	47	45	55	55	34	31	35	33	35	34	32	33	36	35	40	39	33	36	37	48	52	37	44	45	35	....	39.1
Phillipsburg	Maximum	71	54	65	72	58	84	88	89	76	62	54	44	54	52	42	40	44	48	62	55	59	49	63	70	61	67	70	65	60	67	....	61.5
	Minimum	46	33	33	37	47	52	51	53	59	38	35	39	37	40	36	35	37	40	40	42	45	37	37	32	45	50	38	44	46	36	....	41.3
Sussex	Maximum	63	67	63	71	64	76	91	87	82	66	55	50	42	54	46	43	44	43	56	55	47	51	59	68	....	65	....	72	58	66	....	60.9^{b}
	Minimum	48	28	29	33	47	50	51	50	54	34	31	35	34	37	36	32	35	39	36	41	41	34	31	28	....	37	....	31	45	32	....	37.8^{b}
The Red Sandstone Plain.																																	
Bayonne	Maximum	73	54	63	70	65	61	88	86	73	54	53	46	44	43	42	43	41	47	57	55	53	46	60	64	65	64	67	55	56	62	....	58.3
	Minimum	45	32	42	44	43	45	48	56	50	35	36	35	33	38	34	36	32	36	40	38	36	36	42	43	46	46	47	43	46	42	....	40.8
Boonton§§	Maximum	70	52	61	73	63	65	85	85	72	50	53	43	47	46	44	43	45	45	58	58	50	49	60	68	62	66	68	62	58	64	....	58.8
	Minimum	44	30	30	36	45	49	44	53	58	45	34	36	33	35	31	34	35	39	38	42	42	35	35	32	40	48	36	36	44	36	....	39.6
Elizabeth	Maximum	76	76	67	76	66	61	90	91	86	56	53	45	51	46	47	45	47	49	63	59	56	47	64	70	69	69	70	61	63	68	....	62.9
	Minimum	45	34	35	39	48	47	43	54	53	38	36	42	36	38	36	36	36	41	41	43	44	37	31	33	44	55	42	40	50	35	....	41.1
Flemington	Maximum	73	70	69	73	60	69	90	89	83	67	51	45	52	48	43	42	45	49	64	58	62	49	64	74	69	69	71	66	63	69	....	63.2
	Minimum	48	32	37	35	46	52	44	54	59	39	35	38	36	38	35	35	36	39	40	41	44	37	36	32	41	55	37	39	47	34	....	40.7
Highwood	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Maximum	73	58	62	73	62	60	90	89	79	56	51	46	47	44	47	44	47	47	59	56	57	47	60	69	63	67	69	58	60	65	....	60.2
	Minimum	41	33	39	46	50	45	45	65	52	37	37	37	35	38	36	37	36	39	40	43	41	36	40	43	49	56	45	45	46	41	....	42.4
Lambertville	Maximum	71	63	63	72	62	81	87	87	78	62	50	42	52	45	41	41	42	47	60	58	68	46	61	68	63	66	69	62	58	65	....	61.0
	Minimum	48	32	38	40	48	52	45	60	57	38	33	37	34	38	35	35	34	38	38	42	40	35	35	39	47	54	40	43	46	36	....	41.2
Little Falls§§	Maximum	63	54	61	76	63	83	88	89	75	47	54	43	46	47	43	43	46	46	56	55	48	52	59	70	63	65	64	53	58	61	....	59.0
	Minimum	44	31	36	39	46	49	43	53	60	45	35	38	33	35	34	35	36	40	39	42	43	36	32	33	43	53	41	40	49	40	....	40.8
New Brunswick	Maximum	75	71	64	76	59	60	90	90	85	60	50	44	49	45	43	44	45	47	60	59	59	47	61	70	69	69	67	65	61	66	....	61.7
	Minimum	46	33	38	40	48	50	43	56	55	38	36	39	34	38	36	36	36	40	40	42	44	36	36	35	45	57	40	39	49	36	....	41.4
Paterson	Maximum	70	66	65	75	62	56	90	90	83	58	53	47	44	44	44	42	48	47	60	56	50	46	62	70	66	69	70	60	60	68	....	60.7
	Minimum	47	32	39	42	51	49	45	58	57	38	36	38	35	36	37	36	37	41	40	46	41	37	37	40	47	55	44	43	52	40	....	42.5
Plainfield	Maximum	74	65	64	74	62	59	90	90	77	53	48	46	47	44	46	43	47	47	61	58	58	47	63	70	63	68	69	58	61	66	....	60.5
	Minimum	41	33	34	37	47	46	42	52	53	37	34	38	33	37	33	35	35	37	39	42	44	36	33	30	41	54	37	36	46	34	....	39.2
Ridgefield	Maximum	73	54	64	72	63	54	90	89	70	53	51	42	44	42	43	40	47	44	59	55	50	50	61	67	61	67	69	58	59	66	....	58.6
	Minimum	40	32	39	42	48	46	44	57	53	37	35	35	33	36	34	36	35	39	39	43	39	36	35	39	45	50	42	47	45	37	....	40.6
Somerville	Maximum	73	71	64	75	60	64	90	90	80	61	52	45	51	45	42	43	45	47	61	58	61	49	61	70	64	68	68	64	60	72	....	61.8
	Minimum	48	33	34	35	46	52	42	54	57	40	36	38	35	38	35	36	37	40	41	41	43	37	30	30	42	56	35	42	39	37	....	40.3
South Orange	Maximum	74	74	65	77	62	59	91	91	89	61	51	50	48	42	44	43	47	46	63	61	51	48	64	73	70	68	72	61	61	68	....	62.5
	Minimum	45	33	35	39	47	48	42	55	60	38	35	38	34	37	34	36	36	40	39	43	43	36	34	32	42	54	39	38	48	33	....	40.4
Verona	Maximum	71	50	61	74	60	59	86	86	70	52	48	41	43	42	40	40	43	43	56	53	48	44	58	66	63	66	65	57	56	63	....	56.8
	Minimum	39	30	39	44	52	41	44	62	52	35	34	35	33	34	34	34	34	38	38	43	38	35	38	41	50	56	42	44	42	37	....	40.7
New York, N. Y.	Maximum	72	53	61	72	61	60	86	85	72	56	52	46	46	43	46	44	46	46	58	54	54	46	59	63	62	67	66	57	58	63	....	58.5
	Minimum	41	32	40	46	50	45	46	66	51	36	37	37	35	38	36	37	35	39	40	44	41	36	40	46	51	56	46	47	46	41	....	42.7
The Southern Interior.																																	
Belleplain	Maximum	73	70	67	79	67	88	91	91	86	62	46	53	60	52	47	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	47	37	40	47	50	51	56	53	58	40	38	42	30	42	40	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	76	76	66	78	67	84	89	89	82	69	51	46	51	51	46	44	46	50	63	62	75	60	62	69	68	68	67	68	60	65	....	64.9
	Minimum	50	35	49	38	49	51	49	68	61	41	38	40	37	40	37	38	36	40	41	41	46	38	38	34	47	56	43	49	41	35	....	43.5
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	76	74	66	76	65	77	91	90	82	62	48	46	55	50	44	44	45	49	61	63	66	47	61	70	66	70	70	65	60	58	....	63.9
	Minimum	48	34	35	34	47	42	46	52	48	32	35	38	34	38	35	36	35	39	40	39	42	36	32	30	40	42	36	39	47	45	....	39.2
Indian Mills	Maximum	78	70	68	80	69	88	90	92	84	52	48	48	54	53	45	45	45	52	62	76	78	48	61	70	67	72	72	63	61	67	....	65.6
	Minimum	48	35	36	37	50	51	50	55	62	40	37	40	33	41	37	38	36	40	40	39	47	38	34	32	45	55	40	40	49	33	....	41.9
Lakewood	Maximum	72	71	64	78	65	63	89	89	81	56	47	46	52	44	44	44	46	51	62	67	70	45	62	69	68	69	65	60	62	67	....	62.3
	Minimum	49	35	34	37	50	50	44	55	56	39	38	41	37	40	38	38	36	41	40	39	44	38	34	31	43	56	43	37	50	34	....	41.6
Moorestown	Maximum	71	65	66	76	65	80	86	91	79	65	52	47	56	50	48	44	45	54	59	74	79	53	64	70	66	70	68	64	65	65	....	64.6
	Minimum	47	33	38	39	49	52	48	59	59	38	36	38	34	38	38	38	34	38	39	43	44	37	34	38	45	53	42	39	47	36	....	41.8
Moorestown No. 2	Maximum	76	54	66	78	68	86	90	90	74	55	49	46	54	44	44	43	45	53	62	73	77	45	61	69	66	68	67	65	60	65	....	63.1
	Minimum	41	35	39	40	51	52	50	60	56	39	37	37	35	38	37	36	36	40	42	43	41	37	35	39	49	55	45	42	46	36	....	42.3
Pleasantville§§	Maximum	68	56	68	81	68	83	93	91	74	53	50	53	53	47	47	47	47	54	62	62	76	50	61	60	64	72	64	60	62	60	....	62.9
	Minimum	45	36	39	46	52	49	51	52	56	50	39	41	35	39	40	40	35	38	38	31	49	39	33	32	46	51	38	46	49	33	....	42.4
Runyon	Maximum	76	74	74	76	60	82	88	87	77	44	44	44	49	49	45	42	47	49	62	64	62	62	66	70	70	68	70	68	65	67	....	63.4
	Minimum	46	32	30	32	44	41	46	70	44	38	37	42	35	41	37	36	36	40	40	48	44	36	27	26	38	39	36	38	32	35	....	38.9
Trenton	Maximum	74	53	64	76	66	84	88	87	74	56	47	45	54	44	43	42	46	49	60	65	67	47	61	69	65	66	68	64	58	64	....	61.5
	Minimum	40	34	40	45	52	48	47	65	56	38	36	38	36	38	36	36	35	39	40	47	39	37	39	44	50	54	45	45	45	40	....	42.8
Tuckerton	Maximum	60	62	68	80	73	84	90	88	76	63	47	52	50	53	46	47	45	53	63	62	76	62	62	62	62	72	70	58	63	64	....	63.8
	Minimum	44	34	35	42	50	50	47	56	58	38	37	40	32	40	38	37	34	38	38	39	50	36	30	33	47	54	40	43	49	34	....	41.4
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	75	55	67	76	68	87	90	90	76	60	53	48	55	47	46	44	48	52	64	71	73	48	63	68	65	70	68	64	60	65	....	63.9
	Minimum	44	37	42	51	51	57	55	70	58	42	40	42	40	40	38	38	37	41	43	48	45	40	42	48	53	57	50	48	47	45	....	46.4
The Sea Coast.																																	
Asbury Park	Maximum	66	62	64	73	61	58	88	77	75	52	58	46	46	43	43	45	45	50	61	55	53	44	62	59	62	70	61	55	62	65	....	58.7
	Minimum	45	35	40	45	48	45	45	60	50	40	38	40	38	40	37	39	36	40	40	46	43	37	37	41	46	50	45	40	49	39	....	42.5
Atlantic City	Maximum	67	56	68	75	59	86	79	80	69	52	46	50	50	46	44	47	47	53	63	55	66	44	62	56	55	72	60	60	60	54	....	59.4
	Minimum	45	38	46	50	51	51	53	62	50	40	40	41	39	43	42	41	38	41	42	47	43	40	39	49	50	52	48	49	46	43	....	45.3
Cape May City	Maximum	66	53	64	73	58	84	82	82	76	54	49	57	54	57	47	48	48	56	60	58	69	45	60	58	56	72	62	57	61	58	....	60.7
	Minimum	45	40	45	50	50	49	60	57	53	44	41	43	42	43	42	40	38	42	42	44	44	36	38	40	51	53	46	48	49	40	....	45.2
Long Branch	Maximum	68	56	64	73	60	60	90	92	72	53	44	44	43	42	42	44	45	38	58	55	52	43	59	59	59	65	58	52	60	65	....	57.2
	Minimum	45	33	42	43	51	47	45	64	53	43	37	38	37	39	39	38	37	41	40	41	41	38	36	36	44	51	44	41	48	39	....	42.5
Sandy Hook	Maximum	70	52	60	66	57	57	82	85	64	49	45	44	43	42	43	44	45	47	56	55	50	44	57	61	61	64	61	56	57	63	....	56.0
	Minimum	42	36	42	41	47	45	45	53	48	38	37	39	38	38	38	38	38	41	41	45	41	37	40	44	48	53	47	47	47	43	....	42.7

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.192	.240	.224	.164	.074	.192	.256	.224	.188	.072	*	.028	.080	.096	....	....	.078	.160	.192	.096	.200	.052	.192	.160	.042	.160	.224	.094	.256	.160	....	^{b}4.09
	Wind movement	203	130	75	92	73	61	19	130	82	139	115	96	102	97	159	203	131	109	91	162	118	68	97	99	163	110	133	98	96	141	....	3,38
Runyon	Evaporation	.160	.250	.200	.020	.010	.020	.210	.250	.200	.010	.180	.080	....	.032	.020	.130	.020	.120	.225	.020	.070	.040	.140	.180	.010	.120	.210	.050	.040	.210	....	^{a}3.22
	Wind movement	87	204	40	60	25	56	58	54	98	97	106	78	99	138	175	225	129	158	139	39	56	78	64	40	54	152	70	92	98	104	....	2,86

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

51.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. MAY, 1929. No. 5

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Though warmer than any May since 1922, this month averaged below normal in temperature, and broke the continuous succession of warm months that began with October, 1928. The mean rise in temperatures over those of April amounted to 8.8 degrees. The month was almost two degrees warmer than May of last year. Only the seacoast maintained the above-normal temperatures this month, the interior sections being relatively cool. ~~especially the Red Sandstone Plain, which averaged more than 3.5 degrees below normal.~~ The 31st, with maximum temperatures up in the 90's, was clearly the warmest day of the month, but there was no one day so unmistakably marked as the coolest for the State in general. More stations gave the 10th as the date of the minimum for the month than any other date, although the 4th, 8th, and 23d were frequently so noted.

Precipitation was about a quarter of an inch less than normal, owing mainly to a large negative departure in the Southern Interior. The Red Sandstone Plain was well above normal in precipitation. Only one station reported snow, and that only a trace.

High winds damaged houses, and power and telephone lines in central and northern counties on the 19th. At Florence, Burlington County, a heavy thunderstorm on the 31st was accompanied by violent winds which damaged buildings, while falling trees broke wires and disrupted telephone service.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 59.9°, which was 0.2° below normal. The highest temperature was 95° at Belvidere and Indian Mills on the 31st, and the lowest, 26°, at Layton on the 10th. The greatest daily range of temperature was 50° at Layton on the 26th. The highest monthly mean temperature was 62.6° at Burlington, and the lowest, 56.8° at Layton.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +2.3°; Red Sandstone Plain, +1.9°; Southern Interior, +2.5°; Sea Coast, +2.4°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 3.49 inches, which was 0.26 inch below normal. A snow flurry occurred at Culvers Lake on the 3d. The greatest monthly precipitation was 5.58 inches at South Orange, and the least, 1.26 inches at Cape May City. The greatest amount of precipitation in any 24 consecutive hours was 2.40 inches at Runyon on the 19th and at Sandy Hook on the 18-19th. The mean of the number of days on which 0.01 or more of precipitation fell was 13, or 2 more than normal

The precipitation accumulated departure from the normal for the year 1929, to date, by sections, is: The Highlands, +1.54 inches; Red Sandstone Plain, +2.49 inches; Southern Interior, +1.80 inches; Sea Coast, +1.03 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 12 miles per hour, which was 2 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 50 miles per hour from the south at Atlantic City on the 2d. High winds were general on the 3d and 16th, and occurred in scattered sections in connection with thunderstorms on the 19th.

MISCELLANEOUS.

The per cent of possible sunshine was 60, or the normal amount.

The mean atmospheric pressure, reduced to sea level, was 30.07 inches, which was 0.08 inch above normal. The highest reading observed was 30.58 inches on the 11th at Atlantic City, and the lowest was 28.97 inches on the 3d at Long Branch. Previous records for both extremes of pressure for May were broken by the readings this month at most of the stations.

The mean stage of the Delaware River at Phillipsburg was 6.4 feet, and the highest stage was 9.0 feet on the 5th. At Trenton the mean stage was 3.1 feet, or 0.5 foot above normal. The highest stage was 4.7 feet on the 5th.

Dense fog occurred on the 1st, 2d, 5th, 6th, 14th and 15th, mostly along the coast, but was rather general over central and south portions on the 2d. Light hail occurred in scattered areas on the 3d, 5th, 19th and 29th. A thundershower accompanied by high winds and hail at Layton on the 3d resulted in considerable damage. Thunderstorms were reported on the following dates: 1, 2, 3, 5, 6, 7, 12, 15, 16, 18, 19, 24, 25, 28, 29, 30 and 31. Frost, varying in amount of deposit from light to heavy, except mostly light over southern part of the State, occurred on numerous days, the latest being on the 23d. Layton, however, reported a killing frost and ice as late as the 26th.

ERRATA.

March 1929. Total precipitation at Chatham, 4.92 inches, should be 4.62 inches with a corresponding departure of +0-58 inch. Mean precipitation for the Red Sandstone Plain, 3.52 inches, should be 3.51 inches with a corresponding departure of −0.58 inch.

COMPARATIVE DATA FOR MAY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	57.3	90	29	2.74	5.20	1.18	......	......	......	......
1886	58.8	*87*	**36**	6.07	8.46	4.15	......	......	......	......
1887	63.3	94	35	1.37	3.82	*0.08*	......	......	9	6
1888	58.6	90	26	4.92	6.48	3.00	......	......	18	16
1889	62.3	94	32	4.09	6.60	2.43	......	......	11	12
1890	60.7	*87*	33	4.24	7.17	2.60	......	......	11	12
1891	59.5	93	28	2.97	5.39	1.78	9	11	11	9
1892	60.1	90	30	5.04	6.52	3.26	8	13	10	13
1893	59.4	95	29	4.07	6.38	2.55	13	8	10	10
1894	61.4	93	30	**7.72**	**15.61**	3.57	11	9	11	13
1895	60.9	**102**	28	2.85	3.95	1.66	12	12	7	8
1896	**65.3**	98	29	3.21	4.54	1.62	10	12	9	10
1897	60.6	*87*	29	5.68	9.11	1.71	11	12	8	12
1898	58.5	93	29	7.00	9.26	3.92	8	8	15	18
1899	61.1	94	29	1.92	3.15	1.15	12	12	7	9
1900	60.9	98	26	4.71	7.33	2.53	13	7	11	10
1901	58.6	90	29	5.60	8.13	3.10	9	9	13	16
1902	60.3	95	29	2.04	4.63	1.11	15	11	5	7
1903	62.7	98	*21*	*0.59*	*1.32*	*0.08*	16	10	5	4
1904	62.8	97	31	2.60	6.69	1.01	17	9	5	8
1905	61.4	89	22	1.71	3.94	0.42	12	11	8	8
1906	61.0	94	24	4.21	6.28	2.37	16	8	7	10
1907	55.4	91	22	5.05	8.09	2.51	12	9	10	12
1908	61.6	95	29	7.10	9.99	**4.39**	9	10	12	13
1909	60.0	91	27	2.30	4.84	0.79	10	11	10	9
1910	60.0	94	27	2.54	4.25	1.48	10	10	11	12
1911	64.5	99	22	1.37	3.84	0.31	14	11	6	7
1912	62.0	92	31	4.09	6.47	2.79	11	11	9	11
1913	60.3	94	25	3.45	4.86	2.53	15	7	9	9
1914	63.1	98	30	2.93	5.09	0.95	14	9	7	10
1915	58.1	88	30	3.82	6.15	2.00	13	7	11	13
1916	61.1	90	33	3.48	5.27	2.14	12	11	8	12
1917	*54.0*	90	25	3.83	6.83	2.08	10	10	11	11
1918	64.6	93	31	4.94	7.59	2.74	14	10	7	12
1919	60.9	95	31	4.98	7.68	3.06	14	6	11	12
1920	57.4	89	26	3.00	5.23	1.61	15	8	8	10
1921	60.2	96	32	4.17	6.44	2.60	14	7	10	10
1922	63.0	90	23	3.84	7.55	1.16	18	6	7	8
1923	59.1	90	25	1.66	3.62	0.67	20	6	5	6
1924	56.8	87	25	5.69	7.94	3.36	12	7	12	17
1925	57.7	99	23	2.86	4.94	0.49	13	11	7	8
1926	59.1	90	26	2.58	4.52	1.08	18	9	4	9
1927	58.1	88	30	3.65	8.16	1.93	9	10	12	13
1928	58.0	93	27	2.23	3.49	1.26	12	9	10	12
1929	59.9	95	26	3.49	5.58	1.26	13	8	10	13

W. B. O. Philadelphia 6-19-29 830.

Climatological Data for May, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	60.4	−0.3	95	31	32	10	35	3.66	−0.17	0.95	0	11	15	7	9	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	58.2	+0.7	90	30†	29	23	42	3.88	−0.32	0.66	0	15	4	3	24	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	31	4	....	3.49	−0.14	1.05	T.	14	17	5	9	n.	Brice E. Riker.
Dover	Morris	600	45	58.8	+0.2	91	31	33	10†	41	3.47	−0.47	0.80	0	13	6	16	9	......	William C. Harris
Layton	Sussex	480	28	56.8	−1.2	91	30	26	10	50	3.66	+0.41	0.91	0	15	12	8	11	sw.	A. M. Depue.
Newton	Sussex	769	45	60.2	+0.7	92	31	33	4	40	2.80	−1.13	0.61	0	7	8	8	15	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	60.2	−1.1	94	31	35	11	47	2.97	−0.89	0.83	0	10	18	8	5	......	Town Engineer.
Sussex	Sussex	442	34	58.1ᵃ	−1.8	91ᵃ	31	28ᵃ	10	42ᵃ	4.02	+0.30	0.93	0	13	8	12	11	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	59.0	−0.4	95	31	26	10	50	3.49	−0.30	1.05	T.	12	11	8	12	sw.	
The Red Sandstone Plain.																				
Bayonne*	Hudson	37	31	61.9	+1.6	93	31	42	6	24	4.19	+0.23	0.96	0	15	17	10	4	sw.	William Mann.
Boonton	Morris	400	§39	57.6	−1.6	91	31	32	10	40	3.97	−0.09	0.89	0	14	18	0	13	sw.	John Kline.
Chatham	Morris	185	25	......	......		......	......	......	....	5.14	+1.64	1.26	0	14	18	8	5	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	61.0	−1.0	94	31	35	4	37	3.71	−0.11	1.23	0	17	18	8	5	sw.	Union County Park Com.
Flemington	Hunterdon	140	§43	60.6	−0.7	94	31	34	4†	38	4.04	+0.02	1.06	0	16	16	7	8	sw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Jersey City	Hudson	10	31	61.6	0.0	92	31	41	8	32	3.97	+0.39	1.29	0	13	9	12	10	sw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	59.8ᶜ	−1.8	90ᶜ	31	34ᶜ	4	38ᶜ	3.16	−0.86	1.27	0	15	13	9	9	s.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	58.9	−0.8	92	31	33	10	38	4.15	+0.36	1.08	0	[illegible]	14	7	10	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	61.1	+0.7	92	31	35	10	37	3.93	+0.04	1.64	0	[illegible]	15	12	4	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	......	......	......	......	....	3.82	......	0.92	0	11		....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	62.1	+0.6	93	31	40	4†	35	4.38	−0.06	1.00	0	14	16	5	10	nw.	Marion T. Probert.
Plainfield	Union	120	41	59.7	−0.5	92	31	34	23	40	4.49	+0.57	1.07	0	16	9	12	10	sw.	E. D. Pearson.
Ridgefield	Bergen	80	12	60.2	......	92	31	36	10	41	3.96	......	1.02	0	11	13	6	12	s.	George P. Kirsten.
Somerville	Somerset	70	46	59.5ᵃ	−1.3	92ᵃ	31	33ᵃ	17	43ᵃ	3.05	−0.80	1.04	0	14	21	7	3	w.	Arthur Gerlich.
South Orange	Essex	200	57	61.2	+1.2	92	31	32	4	40	5.58	+2.02	1.25	0	13	10	12	9	sw.	Everett W. Bird.
Verona	Essex	490	3	58 8	......	89	31	36	10	37	4.07	......	1.21	0	14	6	12	13	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	3.42	......	0.89	0	11	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	60.6	0.0	90	31	42	8	34	3.64	+0.40	1.23	0	15	6	10	15	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	60.3	−0.3	94	31	32	4†	43	4.06	+0.26	1.64	0	14	14	9	8	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	60.3ᵇ	−0.8	90ᵇ	31	33ᵇ	11†	42ᵇ	2.69	−1.13	0.58	0	9	20	3	8	sw.	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	62.6	+0.7	94	31	37	23	39	2.31	−1.90	0.47	0	13	14	4	13	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	59.9	−1.4	93	31	32	10†	40	3.70	−0.25	1.80	0	11	16	6	9	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	61.6	−0.5	95	31	33	11†	43	1.83	−1.41	0.40	0	10	11	13	7	s.	James M. Armstrong.
Lakewood	Ocean	54	25	61.0	+0.8	94	31	33	4	39	2.83	−0.57	0.90	0	13	12	8	11	sw.	R. W. Holman.
Moorestown	Burlington	75	66	60.8	−0.5	93	31	37	23	37	2.50	−1.52	0.45	0	13	15	7	9	sw	John B. Warrick.
Moorestown No. 2	Burlington	......	....	60.9	......	93	31	33	23	36	2.42	......	0.41	0	15	14	6	11	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	1.84	−1.63	0.35	0	13	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	58.0	......	91	31	34	10†	29	3.86	+0.60	1.09	0	14	21	4	6	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	59.2	......	92	31	29	10	44	4.55	......	2.40	0	13	14	14	3	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	61.6	+0.5	91	31	41	4	35	3.53	+0.45	2.08	0	15	8	9	14	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	3.18	......	1.14	0	14	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	60.2	+0.3	94	31	35	8†	44	2.75	−0.99	0.62	0	14	18	3	10	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa	......	117	58	62.8	−0.1	92	31	44	8	31	2.28	−0.98	0.52	0	15	8	8	15	sw.	U. S. Weather Bureau.
Means and extremes	......	......		60.6	−0.1	95	31	29	10	44	2.92	−0.84	2.40	0	13	15	7	9	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	58.8	0.0	92	31	38	9	33	2.92	−0.66	0.72	0	15	20	5	6	sw.	Information Bureau.
Atlantic City	Atlantic	16	56	58.0	−0.1	85	16	43	10	37	1.90	−1.15	0.73	0	12	8	15	8	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	58.8	+0.2	81	31	41	10	30	1.26	−1.73	0.68	0	10	11	9	11	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	58.4	+0.2	91	31	39	4	35	4.11	+0.35	0.90	0	17	11	11	9	s.	William D. Martin.
Sandy Hook	Monmouth	22	31	59.6	+1.1	91	31	43	4	31	4.86	+1.14	2.40	0	15	8	9	14	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	58.7	+0.3	92	31	38	9	37	3.01	−0.41	2.40	0	14	11	10	10	s.	
For the State	......	......	....	59.9	−0.2	95	31	26	10	50	3.49	−0.26	2.40	T.	13	13	8	10	sw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the meaus.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood: Indian Mills is Atsion: New Milford and Woodcliff Lake are Union City: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfoundland.

Daily Precipitation for May, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.95		.10	.03	.52					.25		.39		.03			.67		.46			.24				T.	.02			3.66
Charlotteburg	Passaic			.21		.35		.66						.35	.33	.10	.07			.45	.07	.41	.01		.03	.24			.19	.41			3.88
Culvers Lake	Delaware			.63		.08	.01	.38					.43		.50	.07				1.05		.22	.01		.02	.05			.02	T.	.02		3.49
Dover	Passaic		*	.19		.20		.75					.35		.25	.11				.80		.51			.29				.02				3.47
Layton	Delaware			.91		.20	.04	.35					.33		.18	.04	.16			.51		.52	T.		.04	.16			.03	.08	.11		3.66
Newton	Delaware			.61		.16	T.					.56	T.	.40	T.	T	.08			.57		.42	T.							T.			2.80
Phillipsburg	...do		T.	.83	T.	.10	.55	.11					.08		.31	.09			T.	.43		.34	T.		.13				T.	T.			2.97
Sussex	Hudson			.43		.21		.44					.71	.11	.30	.14	.02			.93		.39			.07				.26	.01			4.02
The Red Sandstone Plain.																																	
Bayonne	Coast	.07	.25	T.	.14	.05	.55			.05			.45		.26	.22	.06			.96	.20	.45			.42				.06	T.			4.19
Boonton ‖	Passaic		.05	.05			.12	.89						.41	.05	.26				.31	.81	.39	.13			.24				.05	.21		3.97
Chatham ‖	...do		.09	.04			.04	.96						.52	.21	.31	T.	.03		.24	1.26	.18	.34			.68					.24		5.14
Elizabeth	Coast	.11	.07	.03		.06		.58		.02			.12	.42		.04				1.23	.02	.39	.01		.05	.49			.02	.05			3.71
Flemington	Raritan	.03	T.	.27	T.	.13		.74		.03			.11	.28	.33	.05	.04			1.06	.02	.41	.01		.08					.45			4.04
Highwood	Hackensack																																......
Jersey City	Coast	.09	.10	.04		.05	.61			.01			.39		.17	.04	T.			1.29	T.	.46			.45				T.	.27			3.97
Lambertville	Delaware	.08	.05	.18	T.	.13	.02	.43		.08			.04		.30		.02			1.27	.01	43	.08		.04				T.	T.			3.16
Little Falls. ‖	Passaic		.02	.05			.01	1.04						.38	.11	.18				.18	1.08	.52	.10			.44				.04			4.15
New Brunswick	Raritan	.08	.03	.02	T.	.13		.44		.03			.02	.22	.33	T.	T.			1.64	T.	.32	T.		T					.52	.15		3.93
New Milford.**	Hackensack	.09	.06	.06			.84						.49		.05	.10				.92	.07	.49			.65								3.82
Paterson	Passaic	.05	.04	.10		.02		.88					.34	.04	.20	.14				1.00	.20	.65			.02	.70			T.	T.		T.	4.38
Plainfield	Raritan	.11	.01	.01	T.	.10	.10	.50		.01			.44		.24	08	.09			1.07	.01	.46			.37				T.	.89			4.49
Ridgefield**	Hackensack	.03	.06	.06		.30		.61		T.			.51		.15	.08	T.			1.02		.57			.57				T.	T.			3.96
Somerville	Raritan	.05	.01	.01		.06		.60		.01			.07	.15	.32	.12	T.			1.04		.40			.01					.20			3.05
South Orange	Rahway	.05		.03		.09		.78						.58	.28	.09				1.25		.46	.02		.02	.75				1.18			5.58
Verona**	Pa[illegible]	.08		.01		.01	.88	.01		T.			.55		.25	.04	T.		.23	.98	.10	.44			.44				.05				4.07
Woodcliff Lake**	Hac[illegible]ack	.05	.07	.08			.80	.14					.89		.11	.10					.05	.62			.51								3.42
New York, N. Y***	Coast	.08	.12	.04		.04	.54			.01			.43		.13	.05	T		.29	.94	.16	.35			.44				T.	.02			3.64
The Southern Interior.																																	
Belleplain	Tuckahoe	.34	T.			.30		.10		.25				.37	.10	.58				T.		.55				.10							2.69
Bridgeton	Coast																																......
Burlington	Delaware	.26	.02	T.		.20		.45		.07				.47	.18	.03	T.			.27	.04	.25				.05					.02		2.31
Clayton	Delaware																																......
Hightstown	Raritan	.10	.11		T.	.23		.49		.13			T.	.10	.30	T.				1.80		.28			T.	.06				.10			3.70
ndian Mills	Mullica	.22	T.	.03		.10		.20		.16			T.	.28	.15					.40	.08	.21			T.								1.83
akewood	Metedeconk	.26		.08	T.	.28	.03	.35		.09				.09	.22	.08	T.			.90	.07	.35	T.		.03	T.			T.				2.83
Moorestown	Delaware	.33	T.	.05	T.	.18		.45		.08			.37		.14	.04	T.			.16	.05	.23	.02			.40				T.			2.50
Moorestown No. 2	Delaware		.28	.06			.19	.39		.04	.03			.35	.10	.07		.02		.04	.15	.23	.06			.41							2.42
Northfield	Coast	.20	.05	.02		.20	.05			.12				.23	.03		.02			.07	.33	.35				.17							1.84
Pleasantville ‖	Coast		.25	.20		T.	.28	.18	1.09	.05	.08			.55	.04	.01					.29	.66	.02			.16							3.86
Runyon	Coast	.06	.08	.03		.13		.54		.10				.28	.28	.03	.09			2.40		.35								.18			4.55
Trenton***	Delaware	.18	.02	.01	T.	.16	.37			.08			.09		.20	.01	T.		1.56	.52	.12	.14	.01		T.					.06			3.53
renton No. 2 ‖	Delaware	T	.15	.07	T.	T.	.19	.36		.05	.02			.09	.07	.15	T.	T.		1.14	.49	.29	.03			T.					.08		3.18
uckerton	Coast	.25	.05	.40		.26		.12		.06				.20	.06	.02	.27			.26	.05	.62				.13							2.75
ineland	Maurice																																......
hila., Pa***	Delaware	.13	.05	.06		.20	.52			.06			.24		.07	.05	.01		T.	.24	.12	.18	.03		.32				T.				2.28
The Sea Coast.																																	
sbury Park	Coast	.22	.08	.12		.52	.37			.10			.08		.13	.11	T.		.04	.72	.05	.31	.02		.05							T.	2.92
tlantic City***	...do	.25	T.	.09	T.	.10	.09			.12			.21	T.	.02	.01				.09	.54	.19			.19								1.90
ape May City	...do	.12	T.	T.	T.	.05	T.	.04		.14			T.	.01	T.	.02	.10			T.	.52	.24				.02				T.			1.26
ong Branch	...do	.16	.30	.60	.07	.40	.90			.10			.13		.06	.03	.04		.16	.25	.40	.37			.10					T.		.04	4.11
andy Hook***	...do	.08	.02	.04		.17	.70			.07			.58		.17	.04	.28		1.56	.84	.12	.18			.01				T.	T.			4.86

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip- ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.09	30 58	11	29.08	3	16.3	50	s.	2	76	71	79	59
ong Branch	30 09	30.56	11	28.97	3	......	......	......	......	73	63	70	......
oorestown No. 2	......	......	......	......	......	......	......	......	......	80	58	74	......
ew York, N. Y	30.07	30.56	11	29.02	3	14.9	62	w.	16	71	55	64	60
hiladelphia, Pa	30.09	30.57	11	29.00	3	13.1	45	s.	3	79	67	72	53
dgefield	30.07	30.57	11	29.03	3	......	......	......	......	......	......	......	......
andy Hook	30.06	30.55	11	29.00	3	12.8	44	w.	16	76	64	75	61
renton	30.06	30.54	11	28.99	3	9.9	39	nw.	16	74	57	66	61
erona	30.07	30.53	11	28.98	3	7.0	38	nw.	16	71	53	68	59

Daily Temperatures for May, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	74	75	69	60	67	66	67	63	66	67	71	83	71	65	83	79	71	72	73	62	54	69	74	73	76	81	83	88	89	89	95	73.4
	Minimum	45	51	47	34	47	36	47	36	44	32	37	48	51	52	53	50	38	42	54	42	43	47	36	53	45	41	51	68	65	64	68	47.4
Charlotteburg	Maximum	69	70	67	61	66	64	63	62	59	63	68	83	83	67	81	81	76	74	77	60	58	65	66	66	69	77	80	86	86	90	90	71.8
	Minimum	48	48	50	35	53	33	45	35	40	32	30	45	50	42	48	49	36	32	56	42	41	46	29	43	45	37	44	65	59	60	65	44.6
Dover	Maximum	68	68	67	61	67	65	65	60	62	67	69	82	70	60	81	80	67	77	78	64	52	68	70	71	74	81	79	85	81	89	91	71.7
	Minimum	49	52	43	36	48	37	45	37	43	33	37	41	51	48	51	45	37	38	47	41	42	46	33	50	45	43	47	62	64	66	68	46.0
Layton	Maximum	73	73	68	60	65	63	63	59	61	66	68	85	70	55	81	76	65	75	68	60	52	65	69	67	70	78	80	87	84	91	89	70.5
	Minimum	40	52	45	32	42	32	46	31	38	26	30	49	45	44	50	47	34	34	48	43	48	42	28	52	40	28	45	58	62	64	64	43.2
Newton	Maximum	79	79	79	63	68	68	61	63	67	79	83	71	61	64	81	83	68	78	79	61	52	65	78	70	72	79	83	86	88	89	92	73.8
	Minimum	47	53	44	33	47	40	37	41	35	40	45	48	47	48	50	54	36	42	49	42	40	45	38	50	45	43	53	61	60	65	66	46.6
Phillipsburg	Maximum	71	75	69	63	69	67	66	63	64	65	63	85	72	58	83	81	67	79	80	60	54	69	71	73	74	79	81	81	89	89	94	72.8
	Minimum	45	47	46	40	49	38	48	39	46	37	35	38	54	52	55	50	39	43	49	43	45	48	36	52	48	45	51	61	65	64	69	47.6
Sussex	Maximum	73	75	68	60	66	....	63	62	61	66	70	82	70	59	81	77	67	77	72	60	53	65	71	68	72	79	81	87	86	89	91	71.7[a]
	Minimum	43	53	45	35	45	....	32	33	38	28	31	47	47	47	50	50	36	35	55	44	41	45	30	49	41	38	45	58	62	65	66	44.5[a]
The Red Sandstone Plain.																																	
Bayonne	Maximum	61	62	62	60	58	56	62	60	65	66	65	80	75	70	82	84	78	76	80	62	55	70	72	73	74	72	78	76	80	84	93	70.7
	Minimum	50	50	48	47	45	42	45	45	50	51	50	60	56	54	60	62	55	52	56	50	48	50	54	54	54	52	58	56	62	63	68	53.1
Boonton§§	Maximum	65	71	57	60	67	65	65	59	61	67	68	80	70	61	82	80	65	75	77	61	53	67	68	71	74	78	79	85	84	85	91	70.7
	Minimum	41	46	51	36	41	35	45	39	41	32	33	44	49	46	48	53	35	35	45	41	42	43	34	41	43	40	46	56	61	65	70	44.4
Elizabeth	Maximum	64	65	68	63	72	69	68	63	65	67	72	83	73	71	84	84	70	78	84	59	52	70	68	78	76	79	83	88	87	87	94	73.7
	Minimum	44	52	49	35	47	40	48	40	45	37	38	48	53	51	53	52	38	41	58	47	44	49	39	47	49	47	50	60	65	66	68	48.4
Flemington	Maximum	64	75	69	63	68	69	69	66	64	69	69	84	73	69	86	82	67	78	82	59	53	69	72	74	78	80	80	90	88	88	94	73.9
	Minimum	43	52	46	34	47	37	47	37	44	34	37	46	50	50	53	57	35	41	57	42	44	48	36	48	49	45	48	59	65	65	67	47.2
Highwood	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Maximum	63	67	63	61	70	68	66	62	61	64	69	82	72	64	83	82	66	78	81	61	58	69	67	72	72	77	81	85	86	87	92	71.9
	Minimum	52	51	45	42	54	49	48	41	47	43	45	50	54	50	58	52	43	47	52	45	45	48	45	54	51	56	57	63	69	68	70	51.4
Lambertville	Maximum	67	73	67	62	69	70	65	60	62	64	69	80	70	63	81	79	67	77	....	....	....	65	71	76	....	....	80	81	86	84	90	72.2[e]
	Minimum	48	51	45	34	51	44	46	36	42	35	42	42	50	52	57	46	35	43	45	....	43	46	39	49	....	....	49	60	66	65	67	47.4[c]
Little Falls§§	Maximum	64	61	61	68	68	65	65	57	60	63	70	78	72	65	82	82	65	78	81	62	57	65	70	73	68	70	82	85	78	85	92	70.8
	Minimum	45	52	51	39	45	39	47	40	43	33	35	46	52	47	51	55	40	40	58	44	43	45	35	35	47	44	48	60	63	68	68	47.0
New Brunswick	Maximum	61	71	73	63	72	70	67	66	62	64	72	83	77	71	83	85	67	79	83	61	52	67	69	77	74	77	82	86	86	86	92	73.6
	Minimum	46	51	48	38	52	41	48	39	44	35	38	48	52	52	54	60	39	42	59	45	44	49	39	47	51	40	50	59	65	65	68	48.6
Paterson	Maximum	65	69	60	62	71	69	66	65	62	66	72	85	84	71	84	85	69	78	80	72	54	69	69	75	73	74	83	87	89	90	93	73.9
	Minimum	48	54	49	40	47	43	48	41	46	40	44	50	54	51	52	61	42	45	57	46	44	49	42	47	49	50	53	62	68	70	78	50.5
Plainfield	Maximum	63	69	65	64	71	69	67	63	63	64	70	83	72	65	83	83	67	78	82	62	58	69	67	72	70	77	82	86	86	88	92	72.6
	Minimum	43	51	45	35	47	38	46	39	42	35	37	43	51	50	57	58	38	39	52	43	43	47	34	44	47	49	45	56	64	65	68	46.8
Ridgefield	Maximum	66	68	64	62	72	68	66	60	61	66	69	85	72	58	83	83	67	78	81	58	50	69	66	75	74	78	82	85	88	89	92	72.1
	Minimum	49	52	42	37	51	44	47	38	44	36	43	48	54	51	53	42	39	44	49	44	44	46	39	51	48	46	52	62	65	67	69	48.3
Somerville	Maximum	64	71	70	64	70	70	66	62	64	65	70	84	73	68	83	74	67	....	83	59	53	68	70	76	74	79	82	87	88	87	92	72.8[a]
	Minimum	40	52	48	36	44	36	47	35	45	34	36	43	49	50	53	58	33	....	40	40	44	48	34	48	49	43	47	59	61	65	68	46.2[a]
South Orange	Maximum	67	65	68	63	72	70	70	71	69	70	74	84	73	70	86	86	75	80	82	58	52	71	72	76	78	78	83	88	89	90	92	74.9
	Minimum	43	52	47	32	44	38	64	38	43	35	40	46	53	48	51	58	39	40	55	44	43	48	35	42	46	44	49	57	64	65	68	47.5
Verona	Maximum	62	65	66	59	68	66	62	57	60	61	68	80	70	59	80	80	63	75	79	57	49	64	63	73	70	74	78	84	84	84	89	69.3
	Minimum	49	53	42	37	49	46	46	39	44	36	44	48	53	50	54	43	40	44	48	44	42	47	39	50	47	47	53	62	66	67	69	48.3
New York, N. Y.	Maximum	62	62	62	60	68	67	65	59	58	64	65	78	71	63	81	80	63	74	79	59	52	67	62	71	72	74	77	83	83	83	90	69.5
	Minimum	52	52	45	42	55	50	48	42	47	44	46	51	55	50	59	46	44	49	49	45	45	49	47	54	52	57	58	64	69	67	70	51.7
The Southern Interior.																																	
Belleplain	Maximum	....	76	67	70	74	67	68	61	55	62	68	81	72	63	85	85	67	....	83	62	53	67	71	77	75	77	81	88	84	83	90	72.8
	Minimum	....	47	47	35	55	42	57	37	47	37	33	49	55	53	58	60	37	....	46	44	47	47	33	49	33	42	44	59	65	62	65	47.8
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	66	77	73	63	72	71	68	67	65	64	69	83	78	71	83	82	80	78	83	65	52	68	73	79	76	80	83	87	85	85	94	74.8
	Minimum	47	51	48	39	50	43	50	42	45	39	45	58	53	54	55	62	41	45	52	44	46	49	37	49	46	53	56	60	66	65	68	50.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	67	76	68	65	73	70	66	63	65	65	72	82	78	66	83	79	70	80	84	60	52	67	72	78	74	80	84	87	88	89	93	74.1
	Minimum	31	51	44	37	52	37	47	37	43	32	34	48	48	42	52	50	35	40	55	42	44	42	32	49	50	42	46	60	62	63	67	45.7
Indian Mills	Maximum	63	77	68	68	76	71	68	61	60	65	72	86	79	66	87	86	72	82	85	60	52	69	76	80	76	81	84	90	80	89	95	75.0
	Minimum	46	46	49	34	53	39	50	38	45	38	33	48	53	53	59	60	35	44	60	45	46	48	33	48	53	41	46	56	67	64	66	48.3
Lakewood	Maximum	64	68	68	67	73	67	68	67	61	63	70	85	81	67	85	85	69	81	85	59	50	68	67	78	73	72	81	88	87	88	94	73.5
	Minimum	49	43	43	33	53	41	52	38	45	36	39	51	54	50	52	62	38	42	58	49	47	49	34	45	52	42	46	58	64	65	69	48.4
Moorestown	Maximum	62	72	68	65	71	74	68	62	62	65	69	82	75	65	84	83	68	79	82	58	54	68	73	79	74	77	82	87	84	85	93	73.2
	Minimum	48	48	45	44	51	43	48	38	43	38	40	49	50	52	54	52	39	42	58	43	44	46	37	49	51	46	48	58	67	64	66	48.4
Moorestown No. 2	Maximum	62	76	68	65	71	72	65	60	60	62	68	82	70	63	84	82	68	78	83	56	53	67	72	79	74	80	81	87	83	84	93	72.5
	Minimum	50	49	46	39	49	43	49	41	44	40	41	50	53	54	63	46	41	44	48	45	46	44	38	52	53	47	51	61	69	65	67	49.3
Pleasantville§§	Maximum	60	65	58	63	65	66	68	62	54	58	64	75	71	60	83	85	61	70	78	54	52	68	65	68	69	69	73	78	80	85	91	68.3
	Minimum	48	45	47	36	49	41	50	36	45	34	38	50	54	52	54	57	39	49	55	45	47	47	34	51	51	43	44	59	60	60	62	47.8
Runyon	Maximum	64	70	60	67	76	71	68	64	65	68	73	84	83	68	80	84	76	85	81	62	61	71	69	78	74	77	78	80	89	90	92	74.6
	Minimum	44	48	38	37	37	36	48	37	41	29	30	42	48	45	48	50	32	42	52	42	45	48	31	47	42	39	43	54	54	62	64	43.7
Trenton	Maximum	65	71	69	64	70	72	65	60	63	64	69	80	71	61	83	82	67	78	81	56	53	66	72	76	73	79	81	84	87	85	91	72.3
	Minimum	50	54	41	41	55	47	49	41	44	41	45	49	54	54	61	47	41	47	49	44	45	48	46	52	53	53	55	63	69	66	68	50.8
Tuckerton	Maximum	60	69	62	63	69	65	70	68	62	60	68	76	72	67	86	85	81	72	78	76	50	68	69	71	72	70	75	81	82	86	94	71.8
	Minimum	50	46	48	38	52	42	54	35	47	35	37	50	53	52	55	59	37	49	59	46	46	47	38	50	52	43	46	58	60	63	64	48.7
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	63	74	68	64	68	70	68	63	62	64	68	80	71	62	83	82	66	77	79	59	54	68	71	76	75	80	81	85	80	85	92	72.2
	Minimum	51	53	47	45	57	52	53	44	48	41	48	51	57	56	61	51	45	50	49	46	47	48	52	54	57	57	59	63	69	66	69	53.8
The Sea Coast.																																	
Asbury Park	Maximum	63	55	63	56	60	60	68	61	57	61	67	83	83	60	83	86	62	60	82	59	51	68	62	61	69	69	66	71	82	87	92	68.0
	Minimum	43	46	50	39	49	47	50	42	38	42	42	50	51	52	63	55	42	47	51	48	47	49	44	52	55	51	54	56	56	59	69	49.6
Atlantic City	Maximum	57	61	60	58	59	61	69	62	52	55	60	66	68	60	66	85	58	63	68	54	51	67	62	63	63	64	66	67	70	71	82	63.5
	Minimum	52	50	48	45	53	52	54	44	47	43	47	54	57	55	56	48	46	52	54	49	49	50	47	55	56	54	58	61	62	61	68	52.5
Cape May City	Maximum	60	63	59	64	62	64	68	61	54	60	62	73	72	59	80	81	60	67	78	53	55	68	66	72	67	69	69	72	76	76	81	66.8
	Minimum	50	50	49	42	50	47	51	44	43	41	46	53	55	54	57	51	42	53	53	48	49	49	43	54	54	52	55	59	61	60	64	50.9
Long Branch	Maximum	62	60	61	56	64	60	64	60	57	59	64	80	70	64	80	81	57	71	81	52	52	66	59	68	68	66	71	77	84	86	91	67.5
	Minimum	50	48	41	35	45	51	42	52	45	43	42	52	50	52	49	46	41	45	52	47	46	45	40	51	51	48	50	58	62	67	71	49.2
Sandy Hook	Maximum	59	62	62	57	65	65	64	59	55	62	63	76	70	58	77	79	59	70	79	53	51	65	59	68	72	69	72	82	83	83	91	67.4
	Minimum	50	49	46	43	50	48	49	44	46	47	46	53	54	52	58	48	46	49	53	47	46	50	50	55	55	54	57	61	66	67	69	51.9

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.058	.168	.160	.128	.120	.180	†	.274	.016	.224	.192	.198	.088	.026	.176	.144	.224	.192	.258	0	0	.072	.192	.224	.160	.224	.288	.160	.208	.240	.320	6.1
	Wind movement	64	179	111	127	165	19	87	68	42	61	120	88	40	108	95	147	85	102	117	108	60	51	77	81	60	48	71	56	60	64	51	2,6
Runyon	Evaporation	.010	.140	.180	.180	.190	.150	.240	.270	.100	.160	.185	.260	.100	.010	.230	.240	.270	.250	.350	0	0	.180	.240	.180	.250	.250	.240	.240	.240	.240	.240	5.8
	Wind movement	84	30	170	87	100	35	68	91	22	48	40	110	39	20	80	120	56	60	69	60	82	29	46	90	42	28	40	50	34	33	36	1,9

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † 1.250

N/NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

Vol. XXXIV. June, 1929. No. 6

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Following three successive Junes below normal the current month was well above normal, though by no means among the warmest Junes in the record. It was warmer than May by 9.6 degrees, or 1.0 degree more than the difference between the two months last year. Every station in the State was above normal n temperature, the greatest departure being +3.8° at Long Branch, and the least, +0.1° at Elizabeth. The highest temperatures occurred on the 18th and 19th; the lowest, on the 2d, 3d, and 4th.

Rainfall was above normal in the Highlands and Kittatinny Valley, but it was below normal in the other divisions and for the State as a whole. The average amount was less than in June in the two years immediately preceding. Notwithstanding the excess in the north, the average deficiency for the State was over half an inch, and crops in general were needing rain at the close of the month, though much helped by good showers in the ast week.

No destructive hailstorms were reported. Winds of 60 miles n hour or more in gusts, attending a thunderstorm, damaged hree planes on the ground at the Metropolitan Airport, Newark, on the 14th. A Ford monoplane suffered damage estimated at $10,000. A Loening amphibian and a Waco sustained minor damages.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 36 stations, was 69.5°, which was 1.3° above ormal. The highest temperature was 98° at Tuckerton on the 9th, and the lowest, 33°, at Layton on the 4th. The greatest daily range of temperature was 50° at Runyon on the 11th. The highest monthly mean temperature was 72.1° at Burlington, nd the lowest, 66.2° at Runyon.

The temperature departure from the normal for the year, 1929, o date, by sections, is: The Highlands, +2.2°; Red Sandstone Plain, +1.8°; Southern Interior, +2.4°; Sea Coast, +2.4°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 3.11 inches, which was 0.57 inch elow normal. The greatest monthly precipitation was 5.41 nches at Newton, and the least, 1.41 inches at Cape May City. The greatest amount of precipitation in any 24 consecutive hours vas 2.18 inches at Lakewood on the 25th. The mean of the umber of days on which 0.01 inch or more of precipitation fell vas 9, or 1 less than normal.

The precipitation accumulated departure from the normal for he year 1929, to date, by sections, is: The Highlands, +1.80 nches; Red Sandstone Plain, +1.47 inches; Southern Interior, +1.33 inches; Sea Coast, +0.04 inch.

WIND.

The prevailing wind direction was from the southwest. The vind movement averaged 9 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 38 miles per hour from the northeast at Atlantic City on the 10th.

MISCELLANEOUS.

The per cent of possible sunshine was 70, or 9 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.94 inches, which was 0.04 inch below normal. The highest reading observed was 30.17 inches on the 9th at Verona, and the lowest was 29.55 inches on the 28th at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 2.3 feet, and the highest stage was 4.0 feet on the 1st. At Trenton the mean stage was 1.2 feet, or 0.7 foot below normal. The highest stage was 2.4 feet on the 1st.

Dense fog occurred at some stations on the 7, 16, 21, 22, 23, 24 and 25. Light hail was reported at Bayonne, Jersey City and Somerville on the 14th, New Brunswick on the 15th, Layton on the 19th with slight damage, and Trenton on the 20th. Thunderstorms were reported on the 1, 5, 6, 8, 13, 14, 15, 17, 19, 20, 21, 22, 23, 24, 25, 26, 28 and 29. Light frost was reported at Layton on the 2d and 4th and a trace of light frost on the 4th at New Brunswick.

CORRECTION.

May, 1929. In General Summary, place a period, instead of a comma, after "cool" in the eighth line, and cancel the rest of the original sentence.

COMPARATIVE DATA FOR JUNE

THE LIBRARY OF THE UNIVERSITY OF ILLINOIS

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	68.7	97	39	1.79	*3.37*	0.72	......	......	......	......
1886	67.1	91	41	3.38	5.79	2.22	......	......	......	......
1887	68.2	97	42	6.77	10.29	4.21	......	......	9	10
1888	70.8	99	39	2.59	5.69	1.67	......	......	5	6
1889	69.9	91	40	3.73	6.75	2.39	......	......	10	10
1890	70.7	95	42	3.59	5.16	0.99	11	13	6	7
1891	69.7	102	38	2.92	6.71	1.24	14	9	7	5
1892	72.4	98	**44**	3.85	6.12	1.58	10	12	8	11
1893	69.7	103	40	2.95	7.02	0.46	10	11	9	8
1894	70.6	102	35	2.28	5.90	0.99	14	11	5	9
1895	71.7	103	39	3.24	5.99	0.93	11	11	8	10
1896	68.1	96	37	5.46	13.45	2.64	12	10	8	10
1897	66.1	95	35	3.38	5.50	2.12	10	13	7	10
1898	70.1	100	38	2.10	3.54	1.13	14	12	4	8
1899	72.3	103	38	2.50	4.34	1.01	15	10	5	7
1900	70.4	97	39	3.08	4.91	1.10	12	12	6	8
1901	70.0	103	35	*1.57*	4.36	0.73	18	8	4	5
1902	67.5	99	37	6.57	10.21	**4.54**	14	11	5	11
1903	*64.0*	92	37	**7.68**	**15.02**	2.39	6	10	14	15
1904	68.6	100	34	3.13	5.44	1.91	13	10	7	12
1905	68.3	96	35	3.43	8.71	1.67	11	12	7	10
1906	70.4	98	38	4.48	9.18	1.45	11	11	8	12
1907	64.7	96	31	4.41	6.85	3.15	12	10	8	10
1908	69.9	99	35	2.32	4.63	0.77	16	12	2	4
1909	70.0	99	36	3.26	5.70	1.71	9	10	11	12
1910	66.9	95	34	5.17	8.01	2.66	9	10	11	13
1911	68.9	97	40	5.36	10.11	2.84	9	12	9	14
1912	68.0	98	33	1.94	3.61	0.91	9	12	9	8
1913	69.1	98	31	1.80	3.76	0.68	19	8	3	5
1914	68.5	98	35	2.66	4.85	1.09	16	9	6	7
1915	67.0	95	37	3.12	6.51	1.40	13	10	7	11
1916	64.7	*87*	36	4.20	5.99	2.22	10	9	11	13
1917	68.9	95	40	4.27	7.14	2.80	13	10	7	12
1918	66.3	96	32	3.43	6.21	1.35	15	9	6	8
1919	69.5	99	38	3.16	3.58	*0.37*	16	7	7	8
1920	68.4	98	38	6.18	11.26	3.12	13	9	8	12
1921	70.4	100	33	3.23	5.64	1.40	18	7	5	8
1922	71 1	95	39	6.31	11.50	2.97	12	9	9	15
1923	72.5	**106**	37	2.08	5.44	0.72	18	8	4	7
1924	66.8	95	*30*	4.20	7.32	1.72	11	11	8	13
1925	**73.6**	103	36	3.10	6.16	0.72	17	9	4	9
1926	64.9	97	31	2.60	4.73	1.29	12	9	9	11
1927	65.4	97	31	3.16	5.24	1.46	15	9	6	10
1928	66.6	93	36	6.75	10.34	3.03	10	9	11	15
1929	69.5	98	33	3.11	5.41	1.41	15	9	6	9

W. B. O. Philadelphia-7-24-29-830.

Climatological Data for June, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	70.0^{b}	+1.2	95^{a}	14†	41^{b}	2†	42^{b}	3.77	−0.23	0.95	0	11	20	5	5	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	66.6	+1.8	91	18†	36	3	43	3.76	−0.36	0.92	0	10	3	3	24	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	37	3	....	3.70	−0.91	1.12	0	10	18	9	3	e.	Brice E. Riker.
Dover	Morris	600	45	67.8	+1.1	94	18	40	3	41	4.46	+0.43	1.24	0	10	6	15	9	......	William C. Harris
Layton	Sussex	480	28	66.8	+1.3	93	18	33	4	48	4.03	+0.24	1.15	0	12	16	6	8	sw.	A. M. Depue.
Newton	Sussex	769	45	69.8	+1.8	94	18	39	3	38	5.41	+1.43	1.27	0	12	13	5	12	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	69.6	+0.3	94	18	43	2†	42	4.60	+0.97	1.21	0	10	17	9	4	......	Town Engineer.
Sussex	Sussex	442	34	68.3^{b}	+1.5	93^{b}	18	37^{b}	3	46^{b}	4.20	+0.52	0.96	0	12	11	9	10	w.	A. J. W. Mowatt
Means and extremes	......	......	....	68.4	+1.3	95	14†	33	4	48	4.24	+0.26	1.27	0	11	13	8	9	sw.	
The Red Sandstone Plain.																				
Bayonne††	Hudson	37	31	69.6	+1.2	92	19	48	3	22	1.88	−1.90	0.55	0	7	16	12	2	sw.	William Mann.
Boonton	Morris	400	§39	67.8	+0.2	93	18	40	3	40	2.15	−1.52	0.71	0	10	18	2	10	sw.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	2.84	−1.22	0.53	0	9	21	6	3	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	70.6^{a}	+0.1	96	18	42^{a}	3	38^{a}	2.02	−1.60	0.59	0	12	22	6	2	sw.	Union County Park Com.
Flemington	Hunterdon	140	§43	70.4	+1.2	95	18	42	4	40	3.48	−0.36	2.00	0	9	21	5	4	nw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Jersey City	Hudson	10	31	71.3	+0.4	95	18	44	3	28	2.55	−0.95	1.15	0	9	12	14	4	s.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	70.0	+0.3	93	19	41	4	36	2.15	−1.76	0.67	0	10	20	6	4	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	68.6	+0.6	96	18	41	4	43	3.41	−0.11	1.93	0	8	12	13	5	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	70.7	+1.6	94	18†	43	3†	37	5.37	+1.61	1.71	0	10	14	15	1	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	......	......	......	......	....	1.76	......	0.71	0	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	71.8	+2.0	95	18†	45	3	36	2.26	−1.86	0.72	0	9	22	0	8	sw.	Marion T. Probert.
Plainfield	Union	120	41	69.4	+0.8	95	18	41	2	41	2.11	−1.63	0.49	0	10	13	14	3	sw.	E. D. Pearson.
Ridgefield	Bergen	80	12	69.1	......	95	18	41	3	39	2.39	......	0.90	0	9	10	16	4	nw.	George P. Kirsten.
Somerville	Somerset	70	46	69.4	+0.3	95	18†	41	3†	40	2.41	−1.33	1.23	0	10	25	4	1	s.	Arthur Gerlich.
South Orange	Essex	200	57	70.4^{b}	+1.9	96^{b}	18	42^{b}	3	42^{b}	2.05	−1.50	0.45	0	9	13	10	7	sw.	Everett W. Bird.
Verona	Essex	490	3	67.6	......	90	18†	41	3	33	3.12	......	1.12	0	10	8	13	9	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	2.68	......	0.65	0	9	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	70.0	+1.2	93	18	44	3	25	2.30	−1.03	1.09	0	8	4	19	7	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	69.8	+0.9	96	18	40	3	43	2.67	−1.02	2.00	0	10	16	9	5	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	70.0^{a}	+1.3	97^{a}	19	39^{a}	4	42^{a}	2.64	−0.58	1.05	0	8	14	11	5	sw.	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	72.1	+2.4	97	19	43	3	37	2.53	−1.35	1.23	0	7	16	11	3	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	70.2	+1.2	95	14†	38	4	46	3.86	+0.26	1.12	0	11	21	7	2	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	70.2	+0.4	96	19	42	4	44	3.91	−0.22	1.42	0	6	12	14	4	s.	James M. Armstrong.
Lakewood	Ocean	54	25	70.0	+2.5	95	18	42	4	44	4.32	+0.61	2.18	0	10	17	9	4	sw.	R. W. Holman.
Moorestown	Burlington	75	66	70.6	+0.6	95	19	42	4	34	2.37	−1.35	0.85	0	6	15	11	4	sw.	John B. Warrick.
Moorestown No. 2	Burlington	......	....	70.4	......	96	19	44	4	36	2.41	......	0.75	0	7	13	11	6	nw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	2.90	−0.77	0.85	0	7	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	69.0	......	96	19	42	4†	42	2.67	−1.26	0.89	......	8	21	6	3	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	66.2	......	93	19	35	3†	50	3.92	......	2.04	......	8	19	10	1	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	70.8	+1.3	94	19	45	3	32	3.53	+0.44	1.27	0	11	10	12	8	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	3.41	......	1.12	......	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	70.5	+2.1	98	19	38	4	38	3.33	−0.50	1.24	0	7	20	4	6	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa	......	117	58	72.8	+1.4	95	19	48	3	25	2.74	−0.50	1.12	0	7	10	11	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	..	70.0	+1.5	98	19	35	3†	50	3.22	−0.47	2.18	0	8	16	10	4	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	69.0	+1.6	97	19	46	4	30	3.70	+0.08	1.96	0	9	20	7	3	sw.	Information Bureau.
Atlantic City	Atlantic	16	56	68.3	+1.7	92	19	47	4	28	2.02	−1.02	0.99	0	10	12	13	5	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	68.8	+1.1	90	18	46	3	28	1.41	−1.63	0.57	0	10	11	9	10	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	70.0	+3.8	94	19	48	4	30	2.87	−0.93	0.80	0	9	18	6	6	sw.	William D. Martin.
Sandy Hook	Monmouth	22	31	69.6	+1.8	92	18	48	3	25	2.34	−1.44	1.03	0	7	8	15	7	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	69.1	+2.0	97	19	46	3†	30	2.47	−0.99	1.96	0	9	14	10	6	s.	
For the State	......	......	....	69.5	+1.3	98	19	33	4	50	3.11	−0.57	2.18	0	9	15	9	6	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

†† Post-office address as follows.—Culvers Lake is Branchville: * Formerly called Bergen Point: Highwood is Englewood: Indian Mills is Atsion: New Milford and Woodcliff Lake are Uniontown: Northfield is Pleasantville: Pleasantville and Runyon are Trenton: Charlotteburg is Newfouudland,

Daily Precipitation for June, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware					.18		T.								.95	.02			.35	.10		.20	.25	.41	.43	.08		.80				3.77
Charlotteburg	Passaic						.29		.45							.16	.08	.24			.25					.90	.44		.92	.03			3.76
Culvers Lake	Delaware					.08			.10								1.12			.55	.68		.01	T	.20	.29			.63	.04			3.70
Dover	Passaic					.30		*	.38							.23		.78		.31	.88		.06		.10	1.24			.18				4.46
Layton	Delaware					.22			.31							.42				.34	1.15			.04	.13	.90	.02	.03	.42	.05			4.03
Newton	Delaware					.40			.32	T.						1.08				.80	.10		.12		1.27	.61	.04	.02	.61	.04			5.41
Phillipsburg	...do					.17	T.		.29							1.21				.15	.63	T.	.35	.03	.54	.58	T.		.65	T.			4.60
Sussex	Hudson						.53		.11							.96				.50	.26		.27		.68	.26	.04	.07	.49	.03			4.20
The Red Sandstone Plain.																																	
Bayonne	Coast								.30						.55	T.			.05	.08	.10					.40			.40				1.88
Boonton‖‖	Passaic						.22		.16	.13						.13	T.		.19		.06	.07		.06			.71			.42			2.15
Chatham ‖	...do						.24		.21	.30						.25			.04		.35	.53			T.		.40			.52	T.		2.84
Elizabeth	Coast						.08		.40						.20	.10				.05	.20	.04		.03	T.	.04	.28		.59	.01	T.		2.02
Flemington	Raritan						.25		.27					T.		.16				T.	.21	T.		.03		1.88	.12		.33	.23	T.		3.48
Highwood	Hackensack																																......
Jersey City	Coast					.02			.43						.38	.04				.03	.10		T		T.	1.15			.39	.01			2.55
Lambertville	Delaware						.21		.32							.12				.05	.01			.10	T.	.67	.08		.13	.46			2.15
Little Falls.‖‖	Passaic						.17		.26	.05						.07					.04	1.93	T.		T		.45			.44			3.41
New Brunswick	Raritan						.13		.33						T.	.37	T.	T.		T.	T.	1.71	T.	.92	.31	.20	.48		.71	.21	T.		5.37
New Milford.**	Hackensack					.08		.02	.41						.13	.01				.05	.06					.71			.29				1.76
Paterson	Passaic						.18		.30						.03	.11				.12	.28				T.	.02	.70		.50	.02	T.		2.26
Plainfield	Raritan					.13			.36						.04	.08				.04	.22			.44		.31			.47	.02	T.		2.11
Ridgefield**	Hackensack					.05		T.	.42						.04	T.		.06		.05	.15		T.			.69			.90	.03	T.		2.39
Somerville	Raritan						.14		.30						.06	.11				T.	.19	.05	T.	T.	.02	1.17	.06		.31				2.41
South Orange	Rahway						.15		.43						.31						.23	.19		.03		.02	.43		.26				2.05
Verona**	Passaic					.16		.01	.40						.16	.06				.07	.78				.01	1.12			.32		T.		3.12
Woodcliff Lake**	Hackensack					.23		.20	.42									.15		.30	.12				.21	.65			.40				2.68
New York, N. Y***	Coast					.01			.42						.17	.04				.03	.12		T.		T.	1.09			.42		T.		2.30
The Southern Interior.																																	
Belleplain	Tuckahoe						.22		.57						T.	T.	.07				.31	.04		T.			1.05		.36	.02			2.64
Bridgeton	Coast																																......
Burlington	Delaware						.25		1.23							.35				.13		T.				.23	.11		.23				2.53
Clayton	Delaware																																......
Hightstown	Raritan	.20				.07			.40							.14				.55	1.12				.08	.10	.70		.26	.24			3.86
Indian Mills	Mullica						.09		.80							.08				T.	1.42						.24		1.28				3.91
Lakewood	Metedeconk	.11					.09		.40						.62	.08					T.	.22				2.18	.30		.20	.12			4.32
Moorestown	Delaware						.12		.85							.40					T.		T.			.50	.13		.37				2.37
Moorestown No. 2.	Delaware						.15		.45	.42						.30					.03						.75			.31			2.41
Northfield	Coast						.06		.85							T.	.04				.21	.80					.59		.35				2.90
Pleasantville‖‖	Coast						.08			89							.10				T.	.42					.87			.31			2.67
Runyon	Coast						.07		.26										.34			.70			.08	2.04			.31	.12			3.92
Trenton***	Delaware					.12		.02	.46						T.	.42				.09	1.18		T.	.26	.02	.53			.42	.01	T.		3.53
Trenton No. 2‖‖	Delaware	T.					.15		.28	.25						.21	.18				.07	1.12	T.		.12	T.	.58			.45			3.41
Tuckerton	Coast						.07		.72												.02	.21					1.07		1.12	.12			3.33
Vineland	Maurice																																......
Phila., Pa***	Delaware					.15			1.12						T.	.44	T.			.51			.01		T.	.37			.14				2.74
The Sea Coast.																																	
Asbury Park	Coast					.04		T.	.30						.35	.02				T.	.20	.15		T.		1.96	.02		.53	.13			3.70
Atlantic City***	...do					.05	.01		.99		.01					.04				.04	.13					.46	.02		.27				2.02
Cape May City	...do						.02		.27	.01	.01	T.			T.		.01				.08	.08				.05	.52	T.	.36				1.41
Long Branch	...do					.06		.02	.36						.30	.50				.03	.40					.80			.40				2.87
Sandy Hook***	...do					.03			.24						T.	.20				.06	.05		T.			1.03			.73	T.			2.34

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.95	30.14	17	29.65	28	13.8	38	ne.	10	75	71	82	65
Long Branch	29.95	30.14	23	29.56	28					73	62	68	
Moorestown No. 2										75	52	72	
New York, N. Y	29.94	30.14	23	29.58	28	12.2	51	nw.	19	69	56	65	73
Philadelphia, Pa	29.96	30.15	17	29.58	28	11.0	32	n.	1	74	59	61	61
Ridgefield	29.94	30.14	23	29.57	28								
Sandy Hook	29.94	30.14	9	29.55	28	10.6	37	w.	25	76	61	77	73
Trenton	29.94	30.12	17	29.58	28	7.8	29	ne.	20	71	51	64	72
Verona	29.94	30.17	9	29.57	28	5.4	26	nw.	29	70	53	72	

Daily Temperatures for June, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	80	68	69	75	74	76	85	70	78	79	87	....	92	95	81	89	91	95	94	89	92	92	90	90	89	84	83	78	77	78	....	83.4
	Minimum	....	41	41	41	47	48	47	52	45	48	45	....	60	65	65	61	63	60	65	63	65	60	70	70	71	62	57	61	60	48	....	56.5
Charlotteburg	Maximum	89	60	66	68	71	73	80	79	74	75	80	84	89	89	88	80	90	91	91	90	88	87	85	86	84	79	81	80	71	73	....	80.7
	Minimum	60	39	36	38	42	45	40	49	42	40	37	57	52	57	61	54	58	57	59	64	61	55	68	68	69	61	51	51	52	54	....	52.6
Dover	Maximum	79	66	67	73	71	73	82	70	72	73	85	85	89	91	80	87	88	94	89	88	82	85	83	84	84	82	80	71	75	73	....	80.0
	Minimum	52	42	40	41	44	48	45	50	47	44	44	59	56	62	65	58	63	66	65	65	62	59	69	69	69	61	57	56	60	49	....	55.6
Layton	Maximum	74	62	64	72	70	74	82	68	76	77	87	84	90	90	78	86	90	93	92	88	85	87	87	87	85	80	80	74	75	76	....	80.4
	Minimum	53	34	34	33	41	41	41	51	45	44	39	55	57	60	64	58	58	56	62	65	65	58	70	69	70	60	52	54	61	45	....	53.2
Newton	Maximum	87	67	68	79	79	79	83	78	75	83	84	87	94	94	83	86	90	94	92	88	83	87	88	85	84	80	82	79	79	78	....	83.2
	Minimum	58	42	39	42	48	44	51	48	48	48	46	60	59	64	63	57	62	64	65	64	63	61	69	67	67	61	55	57	69	50	....	56.4
Phillipsburg	Maximum	80	67	67	73	74	76	85	67	74	75	87	86	92	93	82	86	90	94	93	88	85	89	90	88	86	81	80	74	77	79	....	81.9
	Minimum	56	43	44	43	48	50	48	52	47	48	45	54	59	64	65	62	62	61	65	66	66	61	70	72	71	64	59	61	61	51	....	57.3
Sussex	Maximum	79	65	66	72	....	....	81	69	76	77	86	85	89	91	82	85	91	93	92	87	85	89	87	86	85	81	81	77	74	73	....	81.6[b]
	Minimum	56	38	37	39	....	....	43	51	42	44	40	57	56	60	63	59	58	57	61	65	65	60	68	68	68	61	63	54	61	46	....	55.0[b]
The Red Sandstone Plain.																																	
Bayonne	Maximum	82	64	64	71	69	71	81	70	68	72	80	82	86	90	82	83	86	82	92	85	79	76	77	78	79	78	77	71	72	74	....	77.4
	Minimum	60	50	48	51	50	52	63	53	54	57	60	64	70	72	72	62	66	70	72	64	64	66	68	69	68	65	61	62	61	56	....	61.7
Boonton§§	Maximum	76	64	66	72	71	72	82	64	76	76	82	82	87	89	82	86	89	93	91	91	83	87	85	88	85	81	82	75	75	76	....	80.3
	Minimum	64	47	40	45	43	49	45	52	43	44	42	52	54	61	64	57	59	60	64	67	62	60	67	68	67	64	54	53	63	47	....	55.2
Elizabeth	Maximum	86	68	68	74	72	76	86	76	74	75	86	87	91	94	84	90	93	96	94	90	86	85	86	86	87	84	83	78	78	78	....	83.0
	Minimum	61	43	42	45	49	51	51	52	49	53	48	....	58	65	67	63	63	63	61	68	64	65	70	71	72	64	58	58	61	49	....	58.1[a]
Flemington	Maximum	85	72	67	73	73	78	84	75	73	73	85	85	90	92	86	89	92	95	93	93	86	91	89	87	88	83	82	77	77	80	....	83.1
	Minimum	60	44	43	42	47	51	49	52	48	50	45	56	58	67	66	60	63	64	68	67	65	62	71	72	70	64	59	60	61	50	....	57.8
Highwood	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Maximum	77	65	67	71	71	75	84	70	72	75	83	84	89	92	84	88	91	95	94	90	84	81	82	84	85	82	81	78	77	80	....	81.0
	Minimum	56	46	44	48	54	55	56	54	54	57	56	62	64	68	70	66	69	71	71	66	66	68	70	71	70	67	62	66	63	58	....	61.6
Lambertville	Maximum	82	65	65	72	73	64	83	78	73	73	84	85	89	91	82	86	89	92	93	88	86	91	90	91	89	81	82	75	75	81	....	81.6
	Minimum	60	43	42	41	49	52	53	50	50	52	48	56	57	68	65	62	65	66	70	66	63	63	71	71	69	63	59	61	61	53	....	58.3
Little Falls§§	Maximum	77	62	65	72	68	72	84	67	71	73	88	86	90	92	85	86	91	96	93	89	84	82	80	86	84	77	81	74	72	75	....	80.1
	Minimum	60	43	42	41	46	49	48	52	46	46	45	61	57	64	66	60	62	61	66	68	62	63	69	70	69	63	59	56	62	57	....	57.1
New Brunswick	Maximum	92	72	67	72	74	75	85	81	72	72	85	86	91	93	87	88	91	94	94	91	84	87	85	83	87	83	82	78	76	80	....	82.9
	Minimum	63	44	43	43	49	52	51	52	48	54	48	58	58	66	67	60	61	65	69	68	64	66	71	71	70	65	59	59	62	50	....	58.5
Paterson	Maximum	87	70	68	73	72	75	85	78	75	74	88	85	92	94	84	89	92	95	95	90	83	85	85	88	87	82	82	77	77	75	....	82.7
	Minimum	66	47	45	46	52	53	53	52	50	52	52	63	61	69	69	65	67	69	73	70	64	66	72	72	72	65	62	61	62	54	....	60.8
Plainfield	Maximum	78	68	67	71	72	77	84	70	72	75	85	86	90	93	84	89	92	95	93	91	84	88	88	87	88	82	81	79	78	80	....	82.2
	Minimum	58	41	42	44	48	50	49	51	47	49	44	56	56	63	65	62	63	61	66	66	63	63	69	70	70	64	57	56	59	47	....	56.6
Ridgefield	Maximum	78	66	69	72	70	75	84	63	72	70	86	82	89	92	84	89	91	95	94	89	83	72	85	86	83	81	82	78	75	75	....	80.3
	Minimum	51	43	41	44	50	50	53	52	48	49	47	60	60	66	68	63	65	65	69	63	62	65	71	71	70	64	59	59	58	52	....	57.9
Somerville	Maximum	83	66	68	73	73	76	85	72	73	74	85	85	91	94	83	88	92	95	95	93	84	90	88	88	90	80	82	75	77	80	....	82.6
	Minimum	58	42	41	41	45	50	47	52	47	50	45	50	59	65	66	58	61	61	67	65	64	62	72	70	70	64	55	59	46	52	....	56.1
South Orange	Maximum	92	70	68	73	74	75	84	83	73	74	87	88	91	93	84	89	91	96	95	90	85	83	....	85	88	85	87	82	79	....	....	83.7[b]
	Minimum	59	44	42	46	47	52	49	51	48	48	45	56	55	64	66	62	62	65	71	67	62	61	....	68	70	63	56	56	61	....	....	57.0[b]
Verona	Maximum	74	63	61	68	68	70	80	64	70	69	81	80	85	87	79	84	88	90	90	86	80	80	81	82	82	77	78	74	72	73	....	77.3
	Minimum	51	43	41	45	51	51	55	50	48	51	48	61	58	67	67	64	66	66	69	63	61	63	68	70	68	63	59	61	61	52	....	58.0
New York, N. Y.	Maximum	76	63	65	70	69	72	82	70	71	73	80	80	85	90	81	85	88	93	92	87	81	78	79	80	81	80	79	73	74	76	....	78.4
	Minimum	54	46	44	49	55	55	57	54	55	58	56	63	64	68	70	66	69	72	71	66	66	68	70	71	68	67	63	66	63	58	....	61.7
The Southern Interior.																																	
Belleplain	Maximum	85	76	....	72	73	76	86	81	66	67	82	81	89	92	85	87	90	93	97	89	82	87	86	87	89	81	83	82	76	80	....	82.8[a]
	Minimum	58	42	....	39	45	45	49	54	51	54	40	50	57	65	66	64	63	63	68	64	64	64	68	67	69	67	55	60	62	49	....	57.3[a]
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	92	73	67	73	75	77	86	85	72	74	85	85	90	94	94	88	91	95	97	90	89	91	90	90	88	88	83	83	78	83	....	84.9
	Minimum	63	48	43	45	48	55	52	54	51	53	48	56	58	66	68	66	68	66	68	68	62	68	68	67	71	68	62	61	52	57	....	59.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	87	67	69	73	74	77	85	70	74	73	87	86	91	95	86	89	93	95	94	92	86	90	88	89	90	83	82	78	81	79	....	83.4
	Minimum	58	39	40	38	49	50	50	46	47	49	41	55	54	60	65	63	65	60	64	65	62	65	70	71	70	65	57	61	67	60	....	56.9
Indian Mills	Maximum	81	70	66	72	73	81	86	75	70	70	87	86	92	94	84	90	93	94	96	92	86	92	87	87	89	82	83	79	75	82	....	83.1
	Minimum	60	43	44	42	43	51	51	54	48	53	43	51	56	64	66	64	62	63	66	66	64	65	70	70	71	66	58	58	61	48	....	57.4
Lakewood	Maximum	91	69	68	72	72	73	87	84	69	67	87	84	92	94	84	88	91	95	93	89	83	84	87	87	86	84	78	78	76	81	....	82.4
	Minimum	60	44	44	42	47	51	50	53	47	53	43	57	55	63	64	66	65	64	66	68	64	66	70	62	71	67	60	57	61	49	....	57.6
Moorestown	Maximum	85	69	64	72	73	76	84	78	74	74	82	84	89	92	85	87	89	94	95	91	85	93	90	92	87	80	81	78	78	78	....	82.6
	Minimum	63	44	44	42	46	53	52	52	49	58	48	54	55	64	64	64	64	65	69	68	68	69	68	68	70	62	59	57	63	53	....	58.5
Moorestown No. 2	Maximum	80	68	65	72	73	76	85	65	72	73	83	83	89	92	83	88	90	94	96	91	84	92	88	89	87	80	81	78	77	81	....	81.8
	Minimum	55	45	46	44	49	54	52	53	51	53	47	55	58	68	67	66	67	66	70	66	64	66	70	71	70	64	60	60	59	55	....	59.0
Pleasantville§§	Maximum	81	69	63	70	70	72	86	80	65	64	84	74	96	87	82	87	87	93	96	89	78	81	83	83	85	85	90	77	77	81	....	80.6
	Minimum	58	44	43	42	51	49	53	55	51	56	42	51	59	63	61	63	62	63	68	63	64	64	68	67	70	66	56	58	61	48	....	57.3
Runyon	Maximum	86	72	70	77	76	74	83	82	76	74	85	87	87	88	78	79	83	89	93	84	85	84	87	80	86	80	78	76	76	79	....	81.1
	Minimum	46	36	35	35	42	48	45	46	48	45	35	42	52	54	63	63	51	47	52	58	54	54	68	70	70	70	53	58	61	42	....	51.4
Trenton	Maximum	79	65	65	72	72	74	84	68	71	71	84	84	89	92	83	87	90	94	94	91	85	89	86	87	87	82	83	77	76	79	....	81.3
	Minimum	54	46	45	46	53	55	55	53	51	54	52	59	61	69	67	65	67	69	71	66	64	67	71	72	69	66	62	64	63	56	....	60.4
Tuckerton	Maximum	84	87	76	69	71	70	86	77	68	72	80	78	88	91	86	91	92	95	98	91	79	82	86	85	88	83	80	79	78	81	....	82.4
	Minimum	58	58	42	38	53	51	52	55	50	56	42	52	59	60	64	65	64	65	75	65	64	65	70	69	70	67	57	61	60	50	....	58.6
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	80	68	65	72	72	77	85	71	76	77	84	83	89	91	82	87	90	94	95	92	84	91	88	89	86	82	81	78	77	80	....	82.2
	Minimum	57	49	48	50	55	58	60	56	55	57	59	61	64	72	70	67	70	74	71	70	68	70	73	72	71	68	65	66	66	62	....	63.5
The Sea Coast.																																	
Asbury Park	Maximum	89	69	64	68	64	67	81	72	68	64	76	70	90	83	80	80	90	89	97	85	85	78	82	78	75	79	78	72	77	85	....	77.8
	Minimum	60	49	47	46	53	47	56	54	56	57	50	60	61	62	63	62	68	69	73	60	65	68	70	71	71	62	62	66	63	55	....	60.2
Atlantic City	Maximum	84	70	59	65	66	67	70	69	62	61	73	70	76	80	81	79	82	90	92	89	73	77	80	79	80	73	76	75	78	76	....	75.1
	Minimum	56	49	47	47	57	58	59	56	56	55	51	60	62	65	63	64	69	69	71	67	65	68	70	71	71	68	63	65	63	59	....	61.5
Cape May City	Maximum	81	68	64	71	69	72	78	66	64	65	74	72	81	78	82	80	83	90	90	90	77	78	82	83	84	72	78	76	78	76	....	76.8
	Minimum	56	49	46	49	56	56	59	57	55	55	49	57	62	64	64	64	66	66	69	66	66	67	69	70	70	64	63	64	67	60	....	60.8
Long Branch	Maximum	72	68	66	70	69	67	84	63	65	65	80	77	89	87	81	85	91	93	94	84	77	81	80	82	75	77	76	79	78	82	....	77.9
	Minimum	67	49	49	48	53	60	55	53	52	52	50	61	60	67	68	70	71	70	72	68	72	72	74	70	64	67	65	66	62	56	....	62.1
Sandy Hook	Maximum	77	65	66	70	68	67	82	64	66	66	82	78	84	90	80	86	89	92	90	85	76	76	79	78	78	81	75	74	75	78	....	77.2
	Minimum	56	50	48	52	55	57	58	54	55	57	57	63	61	68	68	67	68	68	71	65	65	68	69	70	69	68	66	65	65	60	....	62.1

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.288	.128	.160	.192	.176	.192	.064	....	.128	.112	.208	.288	.224	.288	.164	.192	.256	288	.144	.324	.192	.160	.352	.320	.294	.160	.144	.150	.320	.272	....	*6.180
	Wind movement	108	54	46	58	70	46	53	*	120	60	47	52	44	62	39	40	43	44	48	54	51	62	63	59	62	26	39	79	72	58	....	1,659
Runyon	Evaporation	.260	.260	.280	.220	.235	.190	.120	.080	.180	.180	.265	.210	.210	.260	.000	.120	.180	.070	.240	.150	.160	.180	.240	.260	.090	.180	.210	.190	.240	.210	....	5.670
	Wind movement	32	31	38	21	43	32	50	21	38	36	40	45	37	20	21	24	19	21	16	22	20	16	16	16	16	20	20	21	69	26	....	846

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

51.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

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Vol. XXXIV. July, 1929. No. 7

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GENERAL SUMMARY.

While very warm periods, accentuated by the prevailing dryness, occurred during July, the month averaged slightly below normal in temperature, the Red Sandstone Plain being the only section with average departure as much as half a degree. A cool period ran from the 2d to the 4th, with the lowest temperatures of the month generally on the 3d. A close approach to freezing was recorded at Layton on the latter date. From the 15th to about the 22d another cool period occurred. Almost all other days between the 5th and the close of the month were above normal in temperature, a number of them decidedly so.

The average total precipitation has been less for New Jersey in only one July from 1885 to date. Deficiencies in rainfall averaged nearly 3.00 inches. Trenton received less rain in July than ever before in its long record. Crops and pastures in the State suffered greatly for water.

On the 5th, hail as large as marbles fell at Ridgefield, damaging gardens and stripping leaves off of some trees. No windstorms occurred other than thundersqualls.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 34 stations, was 73.0°, which was 0.4° below normal. The highest temperature was 102° at Newton on the 28th, and the lowest, 33° at Layton on the 3d. The greatest daily range of temperature was 46° at Hightstown on the 17th. The highest monthly mean temperature was 75.8° at Elizabeth, and the lowest, 70.3° at Runyon.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +1.8°; Red Sandstone Plain, +1.4°; Southern Interior, +2.0°; Sea Coast, +2.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 40 stations, was 1.64 inches, which was 2.93 inches below normal. The greatest monthly precipitation was 3.93 nches at Culvers Lake, and the least, 0.51 inch at Paterson. The greatest amount of precipitation in any 24 consecutive hours was 3.60 inches at Culvers Lake on the 18-19th. The mean of he number of days on which 0.01 inch or more of precipitation ell was 6, or 4 less than normal.

The precipitation accumulated departure from the normal for he year 1929, to date, by sections, is: The Highlands, —0.66 nch; Red Sandstone Plain, —1.95 inches; Southern Interior, —1.73 inches; Sea Coast, —2.57 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 1 mile bove normal. The highest velocity, sustained for 5 consecutive minutes, was 37 miles per hour from the south at Sandy Hook on the 4th. Moderately high winds also occurred generally on the 4th.

MISCELLANEOUS.

The per cent of possible sunshine was 71, or 8 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.03 inches, which was 0.05 inch above normal. The highest reading reported was 30.44 inches at Verona on the 21st, and the lowest was 29.60 inches at Long Branch and Sandy Hook on the 2d.

The mean stage of the Delaware River at Phillipsburg was 1.4 feet, and the highest stage was 2.7 feet on the 1st. The mean stage at Trenton was 0.5 foot, or 0.8 foot below normal. The highest stage was 1.4 feet on the 1st. On the last two days of the month the river was at the zero of the gage.

Dense fog occurred at a number of stations on the 13th, 18th, 19th, 22d and 23d. Heavy hail was reported at Ridgefield on the 5th. Thunderstorms occurred on the 1st, 5th to 11th inclusive, 14th, 18th, 19th, 25th, 27th, 29th and 30th. Light frost was reported at Layton on the 3d.

NOTE.

The old Moorestown cooperative station was discontinued at the end of June, and the nearby station heretofore designated as Moorestown No. 2 is now designated simply as Moorestown. The normals of precipitation and temperature of the old station are applied unchanged to the continuing station.

COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	75.2	100	44	3.50	7.28	1.29				
1886	73.0	98	48	4.91	7.95	2.98	......	......	......	......
1887	77.1	102	**54**	7.67	15.29	1.95	......	......	......	......
1888	71.1	95	45	3.50	7.03	1.25	......	......	......	11
1889	73.4	95	48	10.19	18.58	4.66	......	......	8	9
1890	72.5	101	39	5.62	7.55	3.60	......	......	13	14
1891	*70.1*	95	43	5.30	9.41	3.03	12	11	8	9
1892	74.3	105	44	4.03	7.96	2.38	10	11	10	12
1893	73.9	102	40	2.72	4.63	1.26	12	14	5	8
1894	75.7	106	44	1.66	5.00	*0.15*	14	13	4	8
1895	70.9	99	41	4.26	7.73	1.53	14	12	5	6
1896	75.0	98	47	5.50	13.29	2.45	12	12	7	10
1897	74.1	102	50	**11.42**	**20.80**	**6.11**	13	10	8	13
1898	75.3	**107**	38	4.96	11.72	2.23	10	11	10	15
1899	74.7	98	38	5.75	9.02	3.34	11	13	7	10
1900	75.9	104	42	4.74	7.21	1.11	13	11	7	11
1901	**77.3**	**107**	45	5.87	10.92	1.89	15	12	4	11
1902	73.0	100	43	4.78	9.92	1.83	9	13	9	14
1903	73.3	100	38	5.51	10.14	3.08	10	12	9	13
1904	72.3	98	42	4.87	8.06	2.41	16	10	5	12
1905	74.4	102	42	4.06	8.19	1.67	13	10	8	13
1906	72.8	*94*	46	5.58	13.25	3.44	12	13	6	12
1907	73.6	96	40	2.62	6.42	0.95	11	14	6	12
1908	75.6	106	42	4.70	8.12	1.97	8	12	11	8
1909	71.6	99	36	2.12	4.03	1.03	12	13	6	9
1910	75.3	99	42	*1.36*	5.33	0.22	14	14	3	5
1911	76.0	104	42	3.64	6.46	2.06	12	12	7	5
1912	73.7	100	36	3.86	9.91	1.01	12	12	7	8
1913	74.4	100	41	2.52	4.72	1.50	14	10	7	9
1914	71.5	97	40	6.05	8.57	1.94	20	9	2	8
1915	72.8	98	44	5.31	11.06	2.23	9	11	11	15
1916	74.4	97	45	5.40	9.01	3.15	10	13	8	14
1917	74.2	104	46	4.83	7.93	2.38	11	9	11	12
1918	72.2	104	39	3.93	13.60	1.20	10	11	10	12
1919	73.5	103	43	8.39	14.14	4.45	17	9	5	8
1920	71.7	96	42	5.76	16 25	1.20	14	7	10	14
1921	76.5	99	43	3.62	7.36	1.66	17	10	4	11
1922	73.0	98	44	5.79	9.26	2.29	14	9	8	10
1923	71.9	102	40	3.88	6.28	0.93	13	9	9	13
1924	71.6	98	41	2.59	5.08	0.84	15	8	8	11
1925	72.0	99	39	7.37	10.09	4.03	19	8	4	6
1926	73.0	105	40	5.46	8.51	1.29	15	9	7	13
1927	72.7	99	36	6.06	9.34	2.95	16	7	8	12
1928	74.2	96	41	6.86	10.22	2.21	13	10	8	11
1929	73.0	102	*33*	1.64	*3.93*	0.51	16	8	7	12

W. B. O. Philadelphia-8-23-29-830.

Climatological Data for July, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr: Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Precipitation in inches: Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	No. of days: Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy	Prevailing direction of wind	Observers
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	73.6	+0.4	98	28	44	3	40	1.97	−3.01	1.80	0	5	26	3	2	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	70.6	+0.6	95	28	38	3	43	1.23	−3.60	0.75	0	5	1	6	24	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	......	......	....	3.93	−0.64	3.60	0	6	24	5	2	e.	Brice E. Riker.
Dover	Morris	600	45	71.6	+0.2	94	28	44	3†	40	0.80	−4.47	0.74	0	3	5	20	6	......	William C. Harris
Layton	Sussex	480	28	70.8	−0.1	94	28	33	3	43	3.76	−0.50	2.81	0	6	21	5	5	sw.	A. M. Depue.
Newton	Sussex	769	45	73.2	+0.7	102	28	45	20	35	2.75	−2.21	1.88	0	7	15	11	5	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	72.7	−1.4	96	28	47	3	39	0.98	−3.87	0.85	0	4	25	6	0	......	Town Engineer.
Sussex	Sussex	442	34	71.0^{m}	−1.1	93^{l}	29	40^{m}	3	44^{m}	3.02	−1.38	2.01	0	6	....	....	....	......	A. J. W. Mowatt
Means and extremes				71.9	−0.1	102	28	33	3	44	2.30	−2.46	3.60	0	5	17	8	6	sw.	
The Red Sandstone Plain.																				
Bayonne††	Hudson	37	31	72.2	−1.8	90	28	54	3†	28	1.00	−3.61	0.40	0	3	....	....	....	......	William Mann.
Boonton	Morris	400	§39	70.7	−1.8	93	28	42	16	41	0.87	−4.03	0.44	0	3	19	3	9	sw.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	1.36	−3.08	0.98	0	4	23	6	2	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	75.8^{b}	+0.5	98^{b}	28	48^{b}	4	40^{b}	1.76	−3.40	0.96	0	7	11	16	4	sw.	Union County Park Com.
Flemington	Hunterdon	140	§43	73.9	−0.7	95	28	46	3	39	1.79	−3.43	1.01	0	6	24	5	2	sw.	Hiram E. Deats.
Highwood‡‡	Bergen	90	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	
Jersey City	Hudson	10	31	75.4	−0.7	96	28	56	3†	26	1.05	−3.39	0.47	0	6	20	8	3	sw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	73.0	−1.3	96	28	47	3	33	1.02	−3.80	0.43	0	7	23	3	5	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	73.1	−0.7	99	28	44	3	37	1.08	−3.31	0.68	0	6	18	9	4	nw.	Passaic Consolid. Water C
New Brunswick	Middlesex	110	76	73.7	−0.3	95	28	48	3	32	2.94	−2.10	0.95	0	9	18	11	2	w.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	......	......	......	......	....	0.83	......	0.67	0	3	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	75.7	+1.3	99	28	51	3	33	0.51	−4.51	0.22	0	4	26	2	3	sw.	Marion T. Probert.
Plainfield	Union	120	41	72.6	−1.4	97	28	44	3	37	1.63	−4.20	0.49	0	7	14	13	4	sw.	E. D. Pearson.
Ridgefield	Bergen	80	12	73.2	......	96	28	47	3	35	1.92	......	1.43	0	7	14	12	5	sw.	George P. Kirsten.
Somerville	Somerset	70	46	72.6	−1.5	97	28	42	3	39	2.58	−2.53	0.87	0	8	24	6	1	w.	Arthur Gerlich.
South Orange	Essex	200	57	73.2^{b}	0.0	97^{a}	28	45^{b}	3†	40^{b}	1.79	−3.22	1.42	0	8	13	13	5	sw.	Everett W. Bird.
Verona	Essex	490	3	71.6	......	94	28	48	3	28	0.74	......	0.46	0	5	9	13	9	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	0.61	......	0.20	0	4	....	....	....	......	Hackensack Water Co.
New York, N. Y		365	59	74.1	+0.3	92	28	56	3	22	0.98	−3.26	0.50	0	5	8	15	8	sw.	U. S. Weather Bureau.
Means and extremes				73.4	−0.6	99	28	42	3†	41	1.40	−3.42	1.43	0	6	18	9	4	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	73.2	−0.6	97	29	42	16	38	0.62	−3.49	0.22	0	4	18	9	4	sw.	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	75.1	+0.1	96	28†	46	3	37	1.35	−3.39	0.67	0	9	13	14	4	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	73.2	−1.2	98	28	42	3†	46	1.47	−3.52	1.04	0	4	22	5	4	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	73.8	−0.9	99	29	43	3	44	1.44	−3.22	0.45	0	7	10	17	4	s.	James M. Armstrong.
Lakewood	Ocean	54	25	72.6	−0.2	95	29	43	3	36	2.38	−2.47	0.62	0	8	15	9	7	sw.	R. W. Holman.
Moorestown	Burlington	......	66	74.0	−0.7	96	29	47	3	33	2.09	−2.59	0.70	0	8	13	9	9	sw.	Japanese Beetle Laborato
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	1.19	−2.41	0.68	0	4	....	....	....	......	William L. Flick.
Pleasantville††‡‡	Atlantic	26	§31	71.5	......	94	11	42	17	38	1.14	−2.84	0.49	......	6	24	3	4	s.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	70.3	......	97	29	37	3	44	2.78	......	1.03	0	7	19	11	1	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	74.6	+0.1	94	28	53	3	30	0.63	−3.31	0.20	0	10	8	10	13	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	0.63	......	0.20	0	8	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	73.9	−0.2	99	9	45	3	35	0.78	−3.10	0.46	0	6	27	1	3	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa		117	58	76.8	+0.6	93	29	58	20	23	1.53	−2.62	0.65	0	9	8	14	9	sw.	U. S. Weather Bureau.
Means and extremes				73.4	−0.4	99	9	37	3	46	1.40	−3.06	1.04	0	7	16	9	6	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	72.4	0.0	95	30	55	16	30	2.22	−2.32	0.98	0	6	23	5	3	sw.	Information Bureau.
Atlantic City	Atlantic	16	56	72.2	+0.1	90	24	57	16	22	1.20	−2.73	0.65	0	6	10	16	5	sw.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	72.6	−0.8	91	10	54	3	23	1.86	−1.92	0.90	0	5	16	10	5	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	71.9	−0.2	93	9	48	3	28	2.07	−2.85	0.78	0	10	14	13	4	s.	William D. Martin.
Sandy Hook	Monmouth	22	31	73.3	−0.4	92	29	58	3	21	1.90	−3.22	0.79	0	9	11	11	9	sw.	U. S. Weather Bureau.
Means and extremes				72.5	−0.3	95	30	48	3	30	1.85	−2.61	0.98	0	7	15	11	5	sw.	
For the State				73.0	−0.4	102	28	33	3	46	1.64	−2.98	3.60	0	6	17	9	5	sw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantvil Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for July, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																
Belvidere	Delaware	.08									.01				T.					1.80						.05				.03			1.97
Charlotteburg	Passaic						.29			.04	.04									.75							.11						1.23
Culvers Lake	Delaware	T.				.01	.15								T.				.14	3.46						.15				.02			3.93
Dover	Passaic	.05								T.										.74										.01			0.80
Layton	Delaware					.51	.14				.23								.47	2.34						T.				.07			3.76
Newton	Delaware	.01				.47				.33	.01				.02					1.88						.03							2.75
Phillipsburg	...do	.03							.03	T.					.07				T.	.85			T			T							0.98
Sussex	Hudson					.42	.38				.10								2.01							.07				.04			3.02
The Red Sandstone Plain.																																
Bayonne	Coast	.35				.40	.25											T.															1.00
Boonton ‖‖	Passaic						.19													.44				T.			.24						0.87
Chatham ‖	...do		.03				.98			T.						T.				.30	.05										T.		1.36
Elizabeth	Coast	.02	.22			.96		T.		.28					T.					.11			T.	.01		T.				.16			1.76
Flemington	Raritan	.43	T.					T.							.09					1.01			.03			.02				.21			1.79
Highwood	Hackensack																															
ersey City	Coast	.06	.06			.47				.26					T.					.15			T.			T.				.05			1.05
ambertville	Delaware	.04	.16			.10				.13		T.			.14					.43			T.			.02				T.			1.02
ittle Falls.‖‖	Passaic		.01				.68	.03		T.										.23	.03						.10						1.08
ew Brunswick	Raritan	T.	.28			.44	.51			.25					.69					.09			T.	.02						.27	.39		2.94
ew Milford.**	Hackensack					.67													.03							.13							0.83
aterson	Passaic	T.				.20									.02					.22			T.			.07				T.			0.51
lainfield	Raritan	.36				.49		T.		.11					.04					.39			T.	.02		T.				.22			1.63
idgefield**	Hackensack	T.				1.43	.01			.23					.03				T.	.20			T.		.01	T.				.01			1.92
omerville	Raritan	.24	.20			.27	.14			.41					.20					.87						T.				.25			2.58
outh Orange	Rahway	.01	.08			1.42				.01					*					.20				.01		.03					.03		1.79
erona**	Passaic	.06				.46	T.								T.				.10	.09			T.			T.				.03			0.74
oodcliff Lake**	Hackensack					.10													.20	.17						.14							0.61
ew York, N. Y***	Coast	.11				.50			T.	.22					T.				T.	.13			T.	T.		T.				.02			0.98
The Southern Interior.																																
elleplain	Tuckahoe	T.	.18									.08										.14				.22							0.62
ridgeton	Coast																															
urlington	Delaware	.01					.02			.67	.01					.15				.34		.01	T.			.08	.06				T.		1.35
layton	Delaware																															
ightstown	Raritan	T.	.04			.25				1.04										.14		T.				T.				T.			1.47
dian Mills	Mullica	.08					.28								.10					.42		.06				.45				.05			1.44
akewood	Metedeconk	.02	.02				.62			T.					.60					.43		.10				.56				T.	.03		2.38
oorestown	Delaware		.32				.10			.70	T.					.53				.14	T.		.10				.13				.07		2.09
orthfield	Coast		.10																	.68		.20				.21							1.19
easantville‖‖	Coast		.04									.02								.38	T.	.08	.13				.49						1.14
unyon	Coast		.21			.82	.26			.16					1.03					.15										.15			2.78
renton***	Delaware	.01	.01			.01			.20	T.	T.				.02				.01	.18		.01	T.			.13				.05			0.63
renton No. 2‖‖	Delaware		.03				.01			20		T.			T.	.02				.17	T.		.02			T.	.11				.07		0.63
uckerton	Coast											.02								.17		.10				.43	.03				.03		0.78
ineland	Maurice																															
hila., Pa***	Delaware	.01				.12			.20	T.					.23					.65		.07	T.	T.		.15	.09			.01			1.53
The Sea Coast.																																
bury Park	Coast	.03	T.			.98				T.					.05					.79		.10								.27			2.22
lantic City***	...do	T	.06					.04			.03									.24		.18				.65	T.						1.20
pe May City	...do		T.		.27		T.					.90	T.									.15	.07			T.		.47			T.		1.86
ong Branch	...do	.20				.78			.12	.10					.03					.40		.09				.01		.30		.04			2.07
ndy Hook***	...do	.24	.01			.79		T.	.26	.26	T.				T.				.05	.22		.02	T.			T.				.05			1.90

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-
tion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
							Highest							
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
antic City	30.04	30.33	21	29.63	2	14.1	35	sw.	25	75	67	80	66
ng Branch	30.03	30.34	21	29.60	2					70	60	66	
orestown										77	53	71	
w York, N. Y	30.03	30.39	21	29.63	2	12.3	37	s.	4	72	56	63	85
iladelphia, Pa	30.04	30.38	21	29.64	2	11.0	36	s.	4	71	50	58	63
dgefield	30.08	30.40	21	29.67	2								
ndy Hook	30.02	30.40	21	29.60	2	10.9	37	s.	4	75	60	74	72
nton	30.02	30.38	21	29.64	2	8.3	28	s.	4	70	49	62	75
rona	30.02	30.44	21	29.61	2	5.1	27	nw.	27	68	48	65	

Daily Temperatures for July, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	78	78	77	85	89	92	95	93	92	89	88	91	90	85	82	88	91	86	78	80	81	80	90	89	87	88	93	98	89	94	92	87.4
	Minimum	63	63	44	47	60	65	69	74	70	67	57	58	58	54	52	50	51	53	63	47	51	53	65	65	67	58	60	73	71	62	64	59.8
Charlotteburg	Maximum	78	74	71	80	87	88	89	90	90	89	88	87	87	86	85	84	86	84	82	74	79	81	86	87	85	83	91	95	93	92	92	85.3
	Minimum	61	63	38	39	57	62	61	62	63	68	54	48	55	60	49	41	43	46	61	46	60	45	62	68	63	50	54	66	71	59	56	55.8
Dover	Maximum	75	75	73	80	85	85	90	90	90	87	85	83	86	85	80	85	88	83	70	78	76	74	87	90	83	85	91	94	88	92	91	84.0
	Minimum	62	62	44	44	60	65	67	74	69	68	57	54	59	64	52	46	48	53	57	45	48	50	64	69	68	56	63	71	74	61	59	59.1
Layton	Maximum	76	75	72	82	82	87	91	89	90	83	85	87	84	88	80	86	87	84	74	76	80	81	86	88	84	84	90	94	88	91	86	84.2
	Minimum	59	60	33	42	61	65	64	75	66	65	61	64	52	65	46	43	46	48	62	41	46	49	64	64	65	57	56	70	75	60	52	57.3
Newton	Maximum	80	85	78	82	85	86	90	90	94	88	84	90	86	88	85	85	87	85	79	79	83	83	94	90	86	87	92	102	90	93	89	86.9
	Minimum	62	62	48	49	60	64	69	72	65	66	58	59	56	66	50	50	52	56	60	45	51	52	64	66	68	57	61	68	72	63	58	59.6
Phillipsburg	Maximum	79	78	75	84	87	90	93	92	93	84	85	89	88	87	79	85	88	84	74	76	78	76	88	91	86	86	90	96	91	94	89	85.6
	Minimum	63	56	47	48	48	65	70	72	70	67	58	58	58	66	52	48	52	53	63	49	52	54	66	66	70	58	62	70	70	62	61	59.8
Sussex	Maximum	77	74	73	82	84	89	90	90	91	86	86	87	87	87	....	....	....	....	....	80	....	....	....	....	....	....	91	....	93	91	87	85.5^{l}
	Minimum	59	60	40	43	59	63	65	72	65	66	52	53	53	65	....	....	....	....	....	43	....	....	....	....	....	....	47	....	....	59	53	56.5^{m}
The Red Sandstone Plain.																																	
Bayonne	Maximum	74	73	70	87	73	83	87	86	84	85	83	80	79	84	74	76	79	77	68	71	75	72	81	87	82	80	84	90	89	88	80	80.0
	Minimum	66	64	54	59	66	66	70	69	68	71	64	68	65	65	62	59	59	62	58	54	60	61	64	68	71	62	64	68	73	71	67	64.5
Boonton§§	Maximum	79	76	73	81	87	88	89	90	89	87	86	86	85	87	80	83	85	83	70	78	80	78	86	90	84	85	89	93	89	91	87	84.3
	Minimum	60	66	45	43	50	64	64	70	67	69	58	53	59	61	50	42	46	49	58	47	46	48	57	63	68	54	56	66	71	59	62	57.1
Elizabeth	Maximum	84	84	78	88	....	91	96	92	93	92	90	86	88	90	82	....	90	87	79	81	82	77	93	95	91	91	93	98	97	97	90	88.8^{b}
	Minimum	63	66	70	48	....	68	68	75	72	69	63	59	61	65	58	49	....	53	63	53	52	55	64	67	71	59	61	68	72	64	67	62.9^{b}
Flemington	Maximum	79	77	76	82	89	92	92	92	94	91	89	85	88	87	81	86	90	84	80	77	77	72	88	94	89	89	89	95	94	94	93	86.6
	Minimum	65	66	46	47	59	65	67	74	72	70	63	58	58	66	54	48	51	53	63	53	51	53	65	67	71	60	62	69	73	63	64	61.2
Highwood	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Jersey City	Maximum	80	77	79	81	86	89	92	92	93	90	86	84	85	88	79	81	84	83	75	73	76	74	88	92	88	87	89	96	95	94	84	85.2
	Minimum	67	62	56	60	65	67	70	74	71	72	65	68	67	67	61	60	61	63	60	56	63	63	65	70	67	64	65	70	74	72	69	65.6
Lambertville	Maximum	79	77	73	83	88	91	92	91	91	88	86	87	89	87	78	85	86	84	72	76	77	72	88	90	83	86	90	96	91	92	91	85.1
	Minimum	65	57	47	53	62	66	61	74	71	68	61	59	56	65	52	51	54	54	61	51	51	55	64	69	70	59	62	69	73	64	66	61.0
Little Falls§§	Maximum	78	75	73	78	90	88	89	92	90	90	86	85	85	85	81	84	85	87	73	79	80	79	91	93	86	89	94	99	91	96	91	85.9
	Minimum	63	65	44	45	59	67	67	75	69	70	59	56	57	63	55	47	49	52	62	49	50	50	64	71	69	56	60	76	75	64	60	60.3
New Brunswick	Maximum	81	77	74	82	88	90	92	92	92	92	87	86	86	87	76	81	85	84	79	75	75	73	87	43	92	88	88	95	93	93	92	85.6
	Minimum	64	67	48	50	65	67	62	75	71	69	64	59	61	66	56	50	53	56	63	51	53	56	64	68	71	59	63	68	73	64	60	61.8
Paterson	Maximum	78	79	76	85	87	87	94	94	93	91	87	86	83	90	80	84	86	86	83	78	78	76	91	94	88	88	94	99	91	96	91	86.9
	Minimum	67	69	51	52	64	69	70	76	72	72	64	63	65	66	58	55	65	58	68	53	55	57	65	71	72	62	65	71	77	68	66	64.5
Plainfield	Maximum	81	78	76	83	87	90	94	93	93	90	86	84	85	88	79	82	84	85	76	73	76	74	89	93	88	88	90	97	96	95	85	85.7
	Minimum	62	63	44	46	59	65	68	72	71	70	61	56	58	64	53	47	49	51	60	50	50	52	59	67	70	56	60	67	72	61	64	59.6
Ridgefield	Maximum	76	78	75	85	87	87	92	92	92	89	87	85	85	88	79	82	86	83	70	77	77	73	89	91	87	87	89	96	89	95	86	85.0
	Minimum	64	53	47	50	67	66	72	74	70	70	61	60	61	66	56	51	54	58	60	50	51	53	65	68	64	58	64	69	73	67	63	61.5
Somerville	Maximum	83	78	75	84	90	91	93	92	92	91	87	86	87	87	80	82	86	86	78	77	75	73	90	93	87	88	90	97	94	94	89	86.3
	Minimum	61	60	42	45	58	63	69	75	71	70	60	56	57	64	50	46	48	51	63	49	49	52	65	65	71	58	61	66	64	60	65	59.2
South Orange	Maximum	81	79	79	85	90	88	....	95	93	92	90	89	83	89	84	82	88	85	83	78	78	79	91	92	92	87	90	97	93	94	93	87.3
	Minimum	46	66	45	45	....	67	....	68	71	69	60	57	61	63	55	48	50	51	62	50	49	51	64	67	68	58	59	67	71	62	62	59.0
Verona	Maximum	76	75	71	79	83	85	88	88	87	86	82	81	78	85	74	79	82	81	68	73	74	71	85	88	84	83	88	94	88	91	83	81.6
	Minimum	66	55	48	52	62	67	70	74	71	71	61	59	64	63	56	54	54	59	59	51	52	54	64	70	64	58	63	70	71	63	64	61.6
New York, N. Y	Maximum	77	75	72	79	85	85	89	89	88	87	85	82	81	86	76	78	81	79	70	73	77	74	83	89	84	82	86	92	91	90	82	82.2
	Minimum	68	59	56	61	66	68	72	75	71	72	66	68	67	67	62	61	61	64	60	56	63	63	66	70	67	64	66	70	75	73	69	66.0
The Southern Interior.																																	
Belleplain	Maximum	85	80	76	81	89	89	91	93	93	94	85	81	85	88	78	80	85	84	75	77	78	78	87	91	91	82	85	93	97	92	91	85.6
	Minimum	63	63	43	46	66	68	69	74	72	69	67	51	48	58	57	42	50	50	62	52	50	61	68	71	67	61	65	65	72	70	61	60.7
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	80	80	80	80	92	91	95	93	93	92	90	87	89	88	85	84	87	86	82	76	78	77	89	92	90	86	87	96	96	93	92	87.3
	Minimum	67	59	46	48	62	68	70	72	70	68	66	62	56	66	60	48	50	55	63	61	60	59	67	69	70	69	67	70	72	63	67	62.9
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	82	78	75	84	92	93	94	94	96	90	87	84	88	86	79	84	88	87	78	76	77	74	90	94	87	88	92	98	96	96	90	87.0
	Minimum	61	65	42	45	64	67	70	71	70	69	58	55	56	65	54	43	42	55	63	48	48	50	65	67	71	55	64	68	72	58	62	59.5
Indian Mills	Maximum	82	79	76	83	92	91	93	95	94	94	87	89	90	90	76	84	89	83	74	75	76	71	90	92	88	87	87	97	99	95	94	86.9
	Minimum	62	68	43	45	63	67	69	75	72	69	64	55	52	63	58	44	45	52	62	54	50	59	66	70	70	60	62	65	70	68	64	60.8
Lakewood	Maximum	81	78	76	82	89	86	92	92	93	92	90	82	84	88	76	78	81	84	81	74	74	71	89	91	86	80	89	93	95	90	88	84.7
	Minimum	63	67	43	46	65	65	68	73	71	70	62	57	55	55	54	46	47	54	63	53	51	55	65	69	70	59	63	67	72	65	63	60.5
Moorestown	Maximum	82	80	75	82	90	90	93	93	91	91	86	87	88	89	76	82	85	84	69	76	78	71	87	92	87	84	86	95	96	94	91	55.5
	Minimum	66	57	47	56	66	68	70	76	70	71	63	60	56	65	53	49	52	58	62	54	54	58	66	69	71	60	64	69	74	68	66	62.5
Pleasantville§§	Maximum	83	80	76	79	82	84	84	93	93	94	82	81	80	89	73	75	80	80	76	76	76	74	86	90	89	78	83	84	92	89	82	82.7
	Minimum	63	68	45	45	64	66	66	67	68	68	67	52	52	62	62	44	42	55	63	54	54	54	65	65	68	60	66	66	68	68	62	60.3
Runyon	Maximum	76	78	76	80	82	84	90	88	93	85	83	84	83	86	83	84	86	80	78	74	71	71	85	87	87	82	90	91	97	89	87	83.5
	Minimum	61	61	37	40	41	66	68	70	74	70	46	46	48	72	66	41	42	41	64	54	52	43	60	65	68	54	54	67	71	64	64	57.1
Trenton	Maximum	81	78	73	81	90	91	92	90	92	89	86	84	89	88	76	82	87	83	69	74	74	71	86	91	83	85	87	94	93	93	89	84.5
	Minimum	67	59	53	56	65	69	71	76	72	72	67	63	62	67	60	55	57	60	63	56	56	59	65	70	72	63	65	69	74	70	69	64.6
Tuckerton	Maximum	83	82	80	80	85	88	86	98	99	98	87	82	83	93	84	78	82	83	78	76	76	70	88	95	92	88	85	88	96	92	84	85.8
	Minimum	64	68	45	52	65	68	68	70	71	69	66	55	55	64	61	46	48	58	63	54	53	64	65	68	69	60	66	67	68	67	64	62.0
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa	Maximum	81	79	75	82	89	90	91	93	93	91	88	88	88	87	79	83	85	82	73	77	80	72	85	91	86	86	86	93	93	92	91	85.5
	Minimum	71	64	59	61	69	71	73	76	74	75	70	70	67	69	64	61	62	65	63	58	62	62	68	71	72	68	69	72	75	74	74	68.0
The Sea Coast.																																	
Asbury Park	Maximum	80	80	75	82	84	74	71	92	92	92	85	80	80	88	76	79	74	78	72	74	73	68	77	91	87	78	78	82	91	95	78	80.[illegible]
	Minimum	67	67	62	56	60	58	59	62	64	70	67	64	62	67	64	55	58	62	61	60	59	65	66	71	74	65	67	68	74	70	64	64.1
Atlantic City	Maximum	81	82	78	73	75	76	76	83	81	85	78	76	77	81	70	73	75	76	78	68	72	75	78	90	90	76	77	79	81	84	77	78.1
	Minimum	68	61	58	65	67	68	67	66	69	72	69	63	64	69	65	57	58	67	66	59	63	67	68	72	68	66	70	70	70	74	70	66.3
Cape May City	Maximum	82	81	76	74	78	80	78	86	85	91	80	77	79	80	74	78	75	78	75	73	77	79	81	89	90	78	77	80	84	87	86	80.3
	Minimum	68	61	54	62	66	66	66	67	69	69	65	62	59	66	59	55	54	64	66	57	59	66	70	72	73	66	67	69	71	74	70	64.9
Long Branch	Maximum	81	80	76	83	84	76	78	90	93	89	83	76	76	86	74	73	75	78	70	70	69	65	85	87	83	74	81	87	91	85	75	79.8
	Minimum	70	65	48	55	69	67	64	74	71	72	66	62	61	67	56	51	52	59	58	54	61	62	64	69	67	61	67	73	76	74	68	64.0
Sandy Hook	Maximum	79	76	72	80	84	81	85	90	89	87	83	75	77	84	73	77	75	77	70	72	73	70	86	86	84	79	83	90	92	88	77	80.5
	Minimum	68	62	58	61	66	65	72	72	68	70	67	66	65	67	62	61	61	63	65	61	63	63	66	72	68	65	67	70	74	72	69	66.1

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.136	.272	.288	.240	.256	.256	.320	.336	.288	.340	.288	.256	.256	.272	.304	.192	.336	.252	.160	.256	.208	.034	.272	.224	.234	.240	.192	.240	.320	.304	.240	7.8
	Wind movement	38	48	53	80	61	61	76	57	51	46	30	49	29	82	54	70	17	75	71	71	82	30	51	46	80	11	57	52	53	46	49	16
Runyon	Evaporation	.160	.160	.210	.220	.180	.200	.260	.250	.240	.280	.230	.230	.220	.070	.180	240	.240	.230	.150	.250	.150	.150	.250	.160	.160	.280	.180	.210	.230	.220	.210	6.4
	Wind movement	20	16	53	26	69	17	44	50	49	18	20	15	19	26	40	14	18	30	22	33	25	42	23	27	28	15	27	23	47	30	29	9

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. **Observations taken in the morning, and entered on preceding day.

51.05
NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.

TRENTON, N. J.

VOL. XXXIV. AUGUST, 1929. No. 8

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The State's average temperature for August was slightly more than 3 degrees lower than for the July immediately preceding, and a little less than 5 degrees lower than last August. It was 2.7 degrees warmer than August, 1927, the coolest August in the New Jersey record. The month was one of seven Augusts since 1885 with mean temperature below 70°. No station had a mean temperature as high as normal, the nearest approach to normal being at Belvidere, where the departure was —0.3°. Boonton's departure, —4.1°, was the greatest.

All stations were below normal in precipitation, the greatest deficit being 5.19 inches at Long Branch, and the least, 0.24 inch, at Culvers Lake. Following the light July precipitation, the rains of August were insufficient to prevent further development generally over the State of an acute situation wherein drought caused a distressing deterioration of crops and pastures, though rains of the third week temporarily aroused hopes. At Trenton the total precipitation for the two months July and August was less than ever before for that period.

Heavy hail did considerable damage in and about Plainfield on the 1st, mostly, apparently, to glass, and damage to crops, especially to fruit trees and bushes, was reported around Hammonton on that date. High winds also caused some damage in the vicinity of Plainfield on the 1st, mainly through uprooting or breaking trees.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 35 stations, was 69.8°, which was 2.0° below normal. The highest temperature was 97° at Belvidere on the 1st and the lowest, 39°, at Charlotteburg on the 21st. The greatest daily range of temperature was 43° at Charlotteburg on the 8th and 26th and at Layton on the 27th. The highest monthly mean temperature was 72.1° at Jersey City, and the owest, 65.9° at Layton.

The temperature departure from the normal for the year, 1929, o date, by sections, is: The Highlands, +1.5°; Red Sandstone Plain, +1.0°; Southern Interior, +1.4°; Sea Coast, +1.4°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from ervations of 42 stations, was 2.58 inches, which was 2.21 inches below normal. The greatest monthly precipitation was 4.36 nches at Plainfield, and the least, 0.88 inch at Sandy Hook. The greatest amount of precipitation in any 24 consecutive hours was 2.47 inches at Plainfield on the 1st. The mean of the number of days on which 0.01 inch or more of precipitation fell was , or 1 less than normal.

The precipitation accumulated departure from the normal for he year 1929, to date, by sections, is: The Highlands, —2.02 nches; Red Sandstone Plain, —3.99 inches; Southern Interior, —4.19 inches; Sea Coast, —6.08 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 2 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 38 miles per hour from the northwest at Sandy Hook on the 4th. High winds also occurred generally on the 4th.

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MISCELLANEOUS.

The per cent of possible sunshine was 69, or 3 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.98 inches, or 0.02 inch below normal. The highest reading reported was 30.34 inches on the 21st at Long Branch, and the lowest was 29.48 inches also at Long Branch. The highest readings at the other stations occurred also on the 21st and the lowest readings on the 4th.

The mean stage of the Delaware River at Phillipsburg was 1.4 feet, the same as the previous month. The highest reading was 3.7 feet on the 15th. At Trenton the mean stage was 0.3 foot, or 0.8 foot below normal. The highest stage observed was 1.8 feet on the 16th. The lowest stage was 0.1 foot below the zero of the gage on the 8th; on twelve other days the stage was zero.

Dense fog occurred almost generally on the 10th and 13th, and in some local areas on the 12th. Light hail fell at Elizabeth and heavy hail at Plainfield on the 1st. Thunderstorms occurred on the following dates: 1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 23, 24 and 27.

COMPARATIVE DATA FOR AUGUST

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	71.7	95	40	6.11	10.09	3.47	......	......	......	......
1886	69.5	96	42	2.81	5.36	1.10	......	......	......	......
1887	70.4	94	42	3.76	7.34	2.09	......	......	......	8
1888	72.5	98	41	6.13	10.53	2.55	......	......	8	9
1889	69.6	91	45	5.13	9.06	1.93	......	......	8	10
1890	71.5	99	40	4.90	7.51	2.89	8	15	8	11
1891	72.8	100	**46**	5.32	8.89	2.58	8	11	12	13
1892	73.4	99	**46**	3.63	5.65	0.72	12	13	6	9
1893	72.8	98	38	6.52	11.94	3.55	14	11	6	8
1894	70.9	97	44	2.58	9.28	0.15	13	12	6	7
1895	74.2	102	*34*	2.53	5.06	*0.02*	16	12	3	7
1896	73.6	105	39	1.83	*3.27*	0.50	17	10	4	7
1897	71.0	91	41	4.39	8.69	2.07	14	12	5	9
1898	74.8	98	42	5.36	9.28	2.70	12	12	7	10
1899	72.3	99	39	4.36	9.70	2.16	10	12	9	9
1900	**76.3**	104	41	2.68	4.56	0.70	15	11	5	10
1901	73.8	98	44	**9.43**	15.80	4.88	12	10	9	11
1902	70.1	93	40	3.91	10.67	1.31	15	13	3	9
1903	68.4	98	39	6.95	14.54	4.30	10	10	11	13
1904	70.8	92	37	6.62	13.01	2.65	15	10	6	9
1905	71.1	95	38	5.72	9.88	3.51	13	10	8	12
1906	74.6	97	42	5.95	**17.91**	2.21	10	11	10	13
1907	70.5	96	39	3.45	7.61	1.79	14	12	5	10
1908	70.6	103	36	5.05	9.23	2.43	11	10	10	10
1909	70.2	100	*34*	4.59	12.94	1.41	14	9	8	6
1910	70.4	92	36	3.78	8.46	1.76	9	10	12	10
1911	72.1	101	39	8.91	14.74	**5.31**	10	11	10	11
1912	70.0	95	35	3.42	7.62	1.19	12	13	6	10
1913	71.7	100	38	4.06	10.21	1.93	18	9	4	10
1914	73.3	98	**46**	3.15	6.53	1.04	13	12	6	9
1915	70.9	98	41	7.73	10.92	4.02	11	11	9	13
1916	73.2	100	40	*1.34*	4.15	0.27	20	7	4	6
1917	74.0	103	42	2.21	5.68	0.86	18	9	4	8
1918	74.4	**108**	40	1.85	4.25	0.34	18	7	6	7
1919	69.9	98	38	6.89	12.88	3.09	13	10	8	13
1920	72.3	94	42	6.10	10.60	2.94	8	11	12	17
1921	69.8	97	38	4.32	8.01	2.05	18	7	6	9
1922	71.2	96	39	4.03	6.78	2.18	13	9	9	12
1923	70.8	98	35	2.44	4.81	1.23	17	8	6	8
1924	71.9	102	38	4.40	9.48	1.82	18	8	5	8
1925	71.0	93	35	2.10	4.12	0.94	20	6	5	7
1926	72.8	101	38	6.58	8.84	3.74	11	9	11	14
1927	*67.1*	*89*	37	8.55	12.87	2.88	11	9	11	12
1928	74.5	99	45	6.72	14.26	3.33	12	8	11	13
1929	69.8	97	39	2.58	4.86	0.88	16	8	7	9

W. B. O. Philadelphia-9-21-29 830.

Climatological Data for August, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	70.7	−0.3	97	1	47	21	39	4.16	−0.45	2.12	0	6	20	5	6	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	66.8	−1.1	95	1	39	21	43	2.30	−2.32	0.97	0	6	5	1	25	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	48	21	....	4.18	−0.24	2.18	0	11	19	7	5	n.	Brice E. Riker.
Dover	Morris	600	45	68.4	−0.7	96	1	43	21	40	1.52	−3.24	0.48	0	6	5	18	8	......	William C. Harris
Layton	Sussex	480	28	65.9	−2.5	92	1	40	20	43	1.71	−2.19	1.12	0	5	16	5	10	s.	A. M. Depue.
Long Valley	Morris	......	....	......	......	......	......	......	......	....	......	......	......	......	..	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	45	69.5^{a}	−0.9	96	1	47^{a}	17†	37^{a}	3.09	−1.33	1.77	0	9	10	6	15	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	69.6	−2.2	96	1	48	8†	38	4.08	−0.54	1.44	0	9	18	7	6	......	Town Engineer.
Sussex	Sussex	442	34	68.9^{i}	−0.6	92^{e}	1	44^{i}	17	42^{i}	3.71	−0.55	1.57	0	8	....	....	....	......	A. J. W. Mowatt
Means and extremes	......	......	....	68.5	−1.2	97	1	39	21	43	3.09	−1.36	2.12	0	8	13	7	11	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	31	69.3	−2.9	86	12	54	5	20	1.70	−3.36	0.90	0	2	15	5	11	nw.	William Mann.
Boonton	Morris	400	§39	67.2	−4 1	93	1	44	8†	39	1.70	−3.38	0.62	0	6	19	1	11	nw.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	2.89	−1.52	1.06	0	8	22	6	3	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	71.2	−2.2	95	1	50	21	38	3.20	−1.09	1.34	0	14	24	5	2	sw.	Union County Park Com.
Flemington	Hunterdon	140	§43	70.8	−1.7	93	1†	49	21	39	3.56	−1.15	2.26	0	12	24	3	4	nw.	Hiram E. Deats.
Jersey City	Hudson	10	31	72.1	−2.0	91	1	56	5	23	1.27	−3.26	0.70	0	8	17	10	4	s.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	70.2	−2.2	94	12	49	21	33	1.96	−2.70	0.96	0	13	23	4	4	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	69.7	−3.5	94	1	47	21	39	3.29	−1.11	1.17	0	9	15	14	2	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	70.8	−1.3	93	1	50	21†	35	2.41	−2.74	1.31	0	12	18	10	3	s.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	....	......	......	......	......	....	2.32	....	0.73	0	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	71.4	−0.8	93	1	50	28	31	2.56	−2.17	0.70	0	12	21	3	7	sw.	Marion T. Probert.
Plainfield	Union	120	41	63.6	−3.2	92	1	49	17†	33	4.86	−0.35	2.47	0	10	12	15	4	s.	E. D. Pearson.
Ridgefield	Bergen	80	12	70.4	.... ..	92	1†	48	21	32	1.64	....	0.78	0	8	14	12	5	sw.	George P. Kirsten.
Somerville	Somerset	70	46	69.8^{e}	−2.6	94^{e}	1	48^{e}	8†	41^{e}	2.58	−2.26	1.05	0	11	24	6	1	......	Arthur Gerlich.
South Orange	Essex	200	57	69.8^{b}	−1.1	92^{b}	1	46^{b}	21	41^{b}	3.67	−1.41	1.30	0	13	12	9	10	sw.	Everett W. Bird.
Verona	Essex	490	3	68.8	......	87	1†	49	21	27	2.56	....	0.68	0	8	....	....	....	......	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	3.00	....	0.78	0	8	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	71.2	−1.9	88	12	56	5	21	1.45	−2.88	0.81	0	9	9	14	8	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	70.0	−2.3	95	1	44	8†	41	2.66	−2.04	2.47	0	10	19	7	5	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	70.5	−2.1	92	12	42	22	41	1.51	−2.79	0.73	0	5	15	7	9	s.	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	71.6	−2.6	93	12	50	17†	31	4.00	−1.45	1.02	0	14	13	11	7	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	70.0	−2.3	93	1	45	21	41	1.27	−3.31	0.66	0	7	21	7	3	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	70.3	−2.3	93	1	45	5	37	3.97	−1.96	2.03	0	7	12	16	3	se.	James M. Armstrong.
Lakewood	Ocean	54	25	69.5	−1.6	90	1	47	21	33	2.82	−3.23	1.03	0	11	19	7	5	nw.	R. W. Holman.
Moorestown	Burlington	......	66	70.8	−1.8	92	1†	48	21	33	2.35	−2.54	0.85	0	9	12	6	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	2.06	−2.29	0.90	0	6	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	68.8	......	89	18	46	21	35	2.28	−2.65	0.90	0	6	17	9	5	nw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	......	......	......	......	......	......	....	1.72	....	0.77	0	9	18	12	1	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	70.8	−2.2	93	12	55	31	27	2.64	−2.11	1.43	0	9	10	11	10	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	3.34	....	1.54	0	8	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	70.2	−2.5	90	18	47	5	40	3.22	−2.32	2.00	0	7	19	3	9	sw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa	......	117	58	73.2	−1.6	92	12	59	5	22	3.22	−1.40	1.53	0	9	9	13	9	n.	U. S. Weather Bureau.
Means and extremes	......	......		70.3	−2.2	93	1†	42	22	41	2.60	−2.46	2.03	0	8	16	9	6	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	68.2	−3.6	92	31	47	20†	41	1.27	−3.79	0.65	0	9	26	2	3	ne.	Information Bureau.
Atlantic City	Atlantic	16	56	71.2	−1.3	87	24	56	31	25	2.42	−2.07	1.18	0	7	12	13	6	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	71.4	−2.0	86	12	55	31	24	1.86	−2.40	0.64	0	6	11	13	7	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	68.4	−2.6	90	24	51	8	24	0.94	−5.19	0.32	0	9	14	12	5	sw.	William D. Martin.
Sandy Hook	Monmouth	22	31	71.2	−1.6	86	12	59	5	21	0.88	−4.10	0.30	0	8	11	11	9	s	U. S. Weather Bureau.
Means and extremes	......	......	....	70.1	−2.2	92	31	47	20†	41	1.47	−3.51	1.18	0	8	15	10	6	s.	
For the State	......	......	....	69.8	−2.0	97	1	39	21	43	2.58	−2.21	2.47	0	9	16	8	7	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfouudland.

Daily Precipitation for August, 1929

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.26			T.				.03		T.		.03	1.50				.22				T.				2.12			T		4.16
Charlotteburg	Passaic	.05		.12	.23					.03					.11	.86				.75									.15				2.30
Culvers Lake	Delaware	.04		.30	.03		T.			T	T.	.38	.32	.17	.50	2.18				.09				.02				.15					4.18
Dover	Passaic			.28						.01		.01			.35					.48				T.				.39					1.52
Layton	Delaware			.48	.02		T.					T.	T.		.44	.68				.09					T.				T.				1.71
Long Valley																																	
Newton	Delaware	.18		.31	T		T.					.34	T.	.04	1.03	.74				.37				.03				.05					3.09
Phillipsburg	...do			.21					T.	T.		.71	.31	.15	1.41	.03				.38				T.				.85			.03		4.08
Sussex	Hudson	.06		.35	.07								.37		1.57	1.13									.05			.11					3.71
The Red Sandstone Plain.																																	
Bayonne	Coast														.80					.90													1.70
Boonton ‖‖	Passaic				.30					.05						.62				.45	.11								.17				1.70
Chatham ‖	...do		.56	.15						.03		.16		T.		.63				1.06	.09								.21				2.89
Elizabeth	Coast	.41	.08	.28	.05					.02	.10	T.	.02		.57	.07				1.34				.04					.05		.12	.05	3.20
Flemington	Raritan	T.		.20	.05					.03		.02	.05	T.	.81	1.45				.70				T.	.02			.16			.01	.06	3.56
Jersey City	Coast	.10		.26						.03	T.	T.			.01	.04				.70				.11				T.			.02		1.27
Lambertville	Delaware	T.	.02	.17	.02					.08		.10	.22	.04	.86	.10				.17				.10				.06		.02			1.96
Little Falls ‖‖	Passaic		.64			.22			.04			.05	T.			1.17				.88	.03				T.				.06			.20	3.29
New Brunswick	Raritan	T.	.03	.15	.02					.02		T.	.03	T.	1.31	.15				.48	T.			T.	.08				.04		.01	.09	2.41
New Milford.**	Hackensack	.24		.22						.07	.28						.18	.57										.73			.03		2.32
Paterson	Passaic	.07		.15	.10					.06	.11	T.	T.		.09	.61				.53				T.	.01			.43	.05		T	.35	2.56
Plainfield	Raritan	2.47		.28	.02					.03	T.	.02	T.		.65	.10				.99				.01				.07			.22		4.86
Ridgefield**	Hackensack	.23		.22						.02	.04	T.			.06					.78				T.				.22			T.	.07	1.64
Somerville	Raritan	.27		.24						.01			.07		.24	.38				1.05								.22	.03		.04	.03	2.58
South Orange	Rahway	.21	.14	.22	.08						1.30		.08		.05	.10				.94								.04	.15		.02	.34	3.67
Verona**	Passaic	.54		*	.32				.01						.36	T.				.68				.01	.35							.29	2.56
Woodcliff Lake**	Hackensack	.44		.18	.06										.73	.15				.55								.78			.11		3.00
New York, N. Y***	Coast	.18		.24					.02	.01	T.	T.			.06	.02				.81				.10				T.			.01		1.45
The Southern Interior.																																	
Belleplain	Tuckahoe				.33				.05			.15				.73															.25		1.51
Bridgeton	Coast																																
Burlington	Delaware	.03		.32	.38			T.		35		.03	.06		1.02	.70				.60				.09	.28				.08		.02	.04	4.00
Clayton	Delaware																																
Hightstown	Raritan	.10		.20						.15		.06	.10	T.	.40	.26															T.		1.27
ndian Mills	Mullica			.44						.07		1.09			1.63	.40								.18							.16		3.97
akewood	Metedeconk	.04		.33	.25					.23		1.03			T.	.30				.12				T.	.08						.29	.15	2.82
Moorestown	Delaware		.07		.41					.53		.18	.10			.85								.12	.07						.02		2.35
Northfield	Coast	T.		.35	.07					.03		.90				.50				T.											.21		2.06
Pleasantville ‖‖	Coast				.50					.01			.90			.55					.10										.22	T.	2.28
Runyon	Coast	.07		.11									.08		.77	.23				.08					.14						.17	.07	1.72
renton***	Delaware			.55	T.		T.		.13	.19		.10	.14	T.	1.43	T.				T.				.05				.01			.04		2.64
renton No. 2 ‖‖	Delaware				.84			T.		.29		T.	.08	.42	T.	1.54				T.				.09					.03		T.	.05	3.34
uckerton	Coast	.02		.72	.04					.03		2.00				.22															.19		3.22
ineland	Maurice																																
hila., Pa***	Delaware	.23		.43	.02		T.			.31		.61	T.	T.	1.53								.01	.07						T.	.01		3.22
The Sea Coast.																																	
sbury Park	Coast			.17	.19				.02	T.		.10	T.		.02	.05				.06				.01						.65			1.27
tlantic City***	...do			.33			T.		.02		T.	1.18			.14	.47				T.				T.						.02	.26		2.42
ape May City	...do	T.		.18	.09							.64	T.			.57								.04	T.					T.	.34	T.	1.86
ong Branch	...do	.06		.20			T.			.07		.10			.03	.10				.03				.03							.32		0.94
andy Hook***	...do	.11		.18					.02			T.			.15	.15				.05				T.				.12			.10		0.88

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ ‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	29.90	30.33	21	29.55	4	12.1	35	s.	3	76	64	75	68
ong Branch	30.00	30.34	21	29.48	4					69	55	67	
oorestown										82	52	74	
ew York, N. Y	29.98	30.33	21	29.53	4	12.4	47	nw.	1	72	56	62	78
hiladelphia, Pa	29.99	30.35	21	29.55	4	10.7	40	nw.	4	69	47	56	64
idgefield	29.98	30.33	21	29.54	4								
andy Hook	29.97	30.33	21	29.51	4	11.1	38	nw.	4	75	60	74	65
renton	29.98	30.32	21	29.54	4	7.9	34	nw.	4	72	49	63	74
erona													

Daily Temperatures for August, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	97	87	80	78	79	79	85	89	89	87	92	91	89	80	84	80	85	90	80	78	83	86	78	87	86	91	89	80	76	77	84	84.4
	Minimum	64	55	52	62	54	56	51	58	59	61	67	63	65	69	65	55	50	57	60	49	47	51	64	64	52	52	55	52	52	54	51	57.0
Charlotteburg	Maximum	95	85	82	71	75	77	79	84	87	88	88	93	90	78	81	74	84	91	87	73	79	83	82	83	83	89	88	81	77	71	72	82.3
	Minimum	54	48	45	59	50	50	52	41	58	55	65	57	59	66	63	51	41	50	58	42	39	43	53	59	43	46	53	48	48	50	46	51.4
Dover	Maximum	96	85	74	72	78	76	82	82	86	84	86	91	85	72	82	77	85	88	81	75	81	82	73	84	84	89	87	77	71	72	79	81.2
	Minimum	60	54	49	60	52	56	62	46	59	60	68	61	61	68	61	52	45	56	60	47	43	47	60	64	52	51	60	50	52	55	51	55.6
Layton	Maximum	92	82	70	70	76	78	80	82	85	85	88	80	88	80	81	75	80	78	77	75	79	82	80	76	84	85	89	81	70	66	83	79.9
	Minimum	58	48	45	59	48	52	44	42	58	54	69	60	57	65	53	50	43	53	58	40	41	45	62	62	61	45	46	51	42	49	49	51.9
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	96	87	75	78	76	85	82	86	87	87	86	87	87	83	81	80	81	90	90	79	78	82	80	85	83	90	87	79	79	76	80	83.3
	Minimum	68	58	54	58	50	56	52	49	58	63	66	....	65	63	64	53	47	58	57	47	48	52	60	63	53	53	60	49	50	53	48	55.7[a]
Phillipsburg	Maximum	96	84	70	76	80	77	83	84	87	89	88	90	85	76	81	78	82	90	78	77	80	84	78	84	86	89	89	78	74	76	81	82.3
	Minimum	61	56	53	62	53	58	53	48	59	62	68	64	64	69	61	54	50	57	61	51	48	51	65	54	65	51	54	53	53	55	50	56.9
Sussex	Maximum	92	83	76	....	....	84	....	80	83	86	89	89	85	77	82	75	82	88	....	76	83	83	77	83	....	88	84	78	71	73	82	81.9[e]
	Minimum	60	53	51	46	....	....	....	66	....	....	65	60	70	63	63	50	44	56	....	69	....	....	58	59	....	46	56	47	45	53	50	55.9[i]
The Red Sandstone Plain.																																	
Bayonne	Maximum	84	78	69	74	74	76	78	76	78	80	79	86	78	73	79	74	76	74	73	73	74	79	76	80	81	83	82	75	70	76	69	76.7
	Minimum	67	60	61	60	54	64	64	62	62	66	69	67	67	66	66	57	62	62	58	56	59	59	64	66	63	63	62	57	60	56	59	61.9
Boonton§§	Maximum	93	84	74	73	77	76	80	83	86	85	84	90	87	76	81	76	81	87	86	75	80	82	75	85	87	87	85	78	73	72	80	80.9
	Minimum	57	52	48	53	54	53	50	44	52	59	62	60	60	66	64	50	44	51	59	50	47	46	50	61	56	48	52	50	52	54	50	53.4
Elizabeth	Maximum	95	85	80	76	81	81	84	83	86	89	86	93	83	81	85	80	86	91	83	78	82	86	81	87	87	92	88	81	78	72	83	84.0
	Minimum	65	56	54	64	51	58	56	52	61	63	67	65	67	69	66	53	51	57	61	55	50	52	60	64	55	54	57	56	57	60	58	58.5
Flemington	Maximum	93	86	79	76	81	83	84	83	89	89	89	93	88	84	85	80	84	89	81	78	84	85	78	84	88	92	88	81	76	71	84	84.0
	Minimum	63	56	52	63	54	58	57	50	61	62	67	63	63	66	65	53	50	56	61	54	49	51	64	66	57	53	54	55	52	58	51	57.5
Jersey City	Maximum	91	82	75	73	78	80	80	81	81	85	84	90	83	83	81	78	82	87	76	75	78	82	79	84	84	87	86	77	75	74	81	81.0
	Minimum	69	61	62	62	56	61	63	65	64	68	69	69	68	68	65	59	64	64	60	58	61	61	66	67	65	64	63	59	61	60	58	63.2
Lambertville	Maximum	92	83	71	74	78	80	82	83	87	89	86	94	88	84	79	76	83	87	77	76	81	84	79	85	85	91	87	76	74	74	80	82.1
	Minimum	65	55	53	62	52	58	57	54	59	62	67	63	63	65	63	53	53	60	60	54	49	56	64	65	61	58	59	54	53	57	53	58 3
Little Falls§§	Maximum	94	84	77	74	79	79	84	84	87	88	88	93	88	79	84	79	86	90	77	77	82	85	78	88	87	92	90	81	76	72	84	83.4
	Minimum	60	54	52	52	54	54	53	48	60	60	66	64	64	69	66	53	49	57	60	48	47	49	60	63	53	53	56	53	53	57	48	56.0
New Brunswick	Maximum	93	87	83	74	80	82	83	81	86	88	85	92	81	83	83	81	81	89	88	76	80	84	81	86	86	89	85	78	78	74	81	83.2
	Minimum	65	57	54	65	55	58	54	53	61	63	66	65	65	66	66	55	52	59	62	51	50	50	63	66	55	54	58	56	52	59	52	58.3
Paterson	Maximum	93	83	80	73	78	80	83	82	86	89	85	90	85	75	83	78	85	90	81	77	81	85	80	87	84	91	89	77	74	71	80	82.4
	Minimum	66	58	59	65	55	60	60	56	63	65	62	67	68	70	67	57	56	61	61	53	53	55	64	65	59	60	61	50	58	60	55	60.3
Plainfield	Maximum	92	82	74	73	79	80	81	81	81	86	84	91	84	83	81	78	82	87	75	75	78	83	79	85	84	87	86	76	75	74	81	81.2
	Minimum	63	52	52	56	50	56	54	50	59	60	66	63	64	67	64	52	49	57	60	52	49	50	60	61	55	54	55	53	53	52	51	56.1
Ridgefield	Maximum	92	83	78	74	78	76	82	82	84	86	87	92	84	82	85	80	83	90	77	77	80	84	79	85	86	89	86	80	74	71	81	82.2
	Minimum	64	56	59	58	52	59	55	51	62	65	68	67	66	69	67	55	51	61	61	50	48	54	62	64	56	57	60	54	55	58	52	58.6
Somerville	Maximum	94	84	75	....	79	81	85	84	88	88	86	93	84	82	83	79	84	89	82	....	....	....	....	87	86	91	89	84	76	82	78	84.3[e]
	Minimum	61	56	50	....	50	51	53	48	60	62	68	62	65	63	64	52	50	48	48	....	....	....	....	60	54	51	54	55	51	54	50	55.4[e]
South Orange	Maximum	92	82	89	75	78	80	83	84	85	87	88	90	83	79	84	84	....	89	....	77	81	84	84	86	87	90	89	79	79	73	81	83.5[b]
	Minimum	61	53	52	60	49	54	52	49	58	62	65	65	65	69	65	52	48	....	....	51	46	49	59	61	55	54	55	52	54	57	51	56.0[b]
Verona	Maximum	87	78	74	72	75	74	78	77	81	84	83	87	82	75	80	74	80	85	76	72	76	80	74	83	81	86	85	74	72	68	84	78.6
	Minimum	63	55	57	63	53	59	55	54	60	64	67	64	67	68	66	55	62	62	54	51	49	57	63	60	57	61	58	53	55	52	65	59.0
New York, N. Y.	Maximum	86	80	75	71	76	76	78	80	80	82	81	88	79	75	81	76	78	85	76	75	76	81	78	82	83	85	84	77	72	71	78	78.9
	Minimum	69	62	63	63	56	62	64	66	64	68	70	69	69	68	65	59	64	64	60	58	61	61	66	68	65	65	64	59	61	61	58	63.6
The Southern Interior.																																	
Belleplain	Maximum	88	85	76	77	78	81	83	82	86	88	82	92	84	86	84	84	83	90	79	75	80	83	83	82	85	87	85	81	83	73	82	82.8
	Minimum	64	58	46	67	47	56	54	56	58	63	69	68	64	71	68	65	64	65	62	48	62	42	67	65	58	48	50	51	46	56	47	58.2
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	92	89	84	76	80	78	82	85	84	87	86	93	92	85	81	80	81	89	86	80	81	83	82	83	83	89	87	83	79	77	81	83.8
	Minimum	66	58	54	63	60	56	61	55	60	65	67	69	64	66	66	56	50	62	65	56	50	56	53	68	67	62	57	57	52	53	52	59.5
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	93	86	80	72	80	83	86	84	88	89	86	92	86	88	84	78	84	90	86	79	82	85	83	86	88	89	88	80	82	75	81	84.3
	Minimum	64	53	48	65	54	57	56	49	59	62	63	64	64	68	64	53	46	59	62	46	45	49	64	63	50	48	58	46	47	52	49	55.7
Indian Mills	Maximum	93	85	75	75	78	84	82	85	87	90	84	92	87	85	80	74	86	92	79	76	83	85	82	84	82	90	89	78	80	75	82	83.2
	Minimum	65	58	50	66	45	52	58	54	61	65	68	64	64	70	64	52	49	57	65	54	47	50	64	66	50	57	52	57	47	57	50	57.4
Lakewood	Maximum	90	89	78	75	78	81	80	79	81	85	81	86	79	83	81	78	79	87	83	75	76	82	83	84	81	84	87	85	75	71	77	81.1
	Minimum	64	56	50	66	52	57	60	52	62	65	68	66	67	71	65	55	50	58	63	51	47	49	62	65	54	51	55	58	49	57	50	57.9
Moorestown	Maximum	92	83	74	76	79	82	82	84	84	89	84	92	88	84	81	76	81	88	79	77	80	83	81	85	84	88	85	78	76	77	80	82.3
	Minimum	61	59	54	62	57	59	60	56	60	66	69	64	64	67	62	56	61	59	61	53	48	55	66	67	59	55	59	57	50	57	52	59.3
Pleasantville§§	Maximum	88	77	76	76	78	81	79	79	80	85	79	86	79	82	85	85	81	89	76	77	79	80	80	86	79	82	82	83	78	74	82	80.7
	Minimum	60	59	47	69	48	57	54	53	63	64	69	57	66	68	64	50	48	56	64	51	46	49	63	64	57	53	53	57	48	55	50	56.8
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	92	83	73	74	76	79	81	81	83	87	83	93	84	83	80	75	83	87	76	75	79	82	81	84	82	87	83	76	75	73	78	80.9
	Minimum	69	60	60	60	55	60	61	59	60	66	69	66	64	64	62	56	56	62	62	56	56	58	65	67	63	60	61	58	57	59	55	60.8
Tuckerton	Maximum	88	82	78	79	78	85	79	78	82	88	78	87	82	82	86	79	81	90	85	78	78	80	82	88	82	84	85	77	77	76	83	81.8
	Minimum	66	58	53	68	47	58	56	57	64	65	68	67	67	72	64	57	56	50	65	50	48	54	67	65	56	55	57	57	48	55	50	58.7
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	89	83	75	76	78	80	81	83	84	88	86	92	89	83	81	77	81	88	79	76	81	83	79	84	84	86	83	77	76	74	81	81.8
	Minimum	72	63	64	64	59	65	66	64	62	68	69	70	69	69	66	61	63	66	64	60	60	62	66	70	69	65	65	62	61	62	60	64.7
The Sea Coast.																																	
Asbury Park	Maximum	86	76	75	76	78	81	78	90	79	80	76	84	75	79	76	77	77	88	89	77	76	81	80	83	80	83	78	75	74	80	92	80.1
	Minimum	68	65	60	66	51	61	64	51	57	61	62	62	60	62	66	68	59	58	48	47	47	48	48	48	48	48	48	47	47	55	63	56.2
Atlantic City	Maximum	86	77	74	77	78	78	74	77	76	79	76	83	77	80	85	77	78	80	75	72	76	77	76	87	75	78	76	72	73	71	81	77.5
	Minimum	73	61	69	62	59	67	62	65	68	70	70	71	69	67	66	59	60	70	66	58	57	67	71	69	66	63	67	62	60	60	56	64.9
Cape May City	Maximum	82	77	75	76	76	78	80	78	81	80	79	86	81	81	82	76	79	83	76	74	78	78	77	85	82	79	77	76	78	74	79	78.8
	Minimum	70	61	64	66	62	66	62	65	68	69	70	70	68	69	67	60	59	68	63	57	58	66	69	67	63	61	64	60	57	56	55	64.0
Long Branch	Maximum	86	79	76	80	72	74	70	71	70	74	78	82	73	77	80	75	75	85	73	74	72	77	78	90	75	81	82	75	70	70	77	76.5
	Minimum	68	63	65	56	53	56	56	51	58	61	64	67	68	70	63	53	61	63	62	56	52	57	69	66	64	58	61	59	54	53	60	60.3
Sandy Hook	Maximum	84	79	74	73	77	78	80	75	76	81	78	86	72	77	81	76	77	86	74	75	72	80	77	81	81	84	84	77	72	68	78	77.8
	Minimum	69	63	63	63	59	61	65	63	65	67	69	68	67	69	66	62	64	65	64	62	63	62	67	69	67	65	64	62	62	62	59	64.5

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.240	.320	*	.372	.272	.192	.256	.266	.160	.160	.164	.176	.128	198	.240	.224	.224	.160	.100	.256	.176	.192	.128	.304	.240	.240	.208	.288	.172	.128	.192	6.376
	Wind movement	49	49	88	54	53	28	46	72	29	65	56	19	46	80	28	40	30	38	40	41	33	74	69	52	45	37	61	48	55	49	54	1528
Runyon	Evaporation	.170	.240	.110	.180	.240	.210	.240	.240	.240	.250	.140	.180	.120	.110	.190	.180	.265	.240	.260	.200	.210	.210	.110	.200	.200	.210	.220	.150	.140	.170	.100	5.925
	Wind movement	16	22	25	30	66	15	18	20	22	26	22	20	26	33	27	20	20	21	24	16	22	19	26	33	9	22	18	14	21	21	8	705

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

/.05
/NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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OCT. 25 1929
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NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.

TRENTON, N. J.

L. XXXIV. SEPTEMBER, 1929. No. 9

OTE.—The price of this publication is 50 cents per year (not in stamps), payable to Superintendent of Documents, Government Printing Office, Washington, D. C. It urnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

This was the warmest September since that of 1925. All sta- ns except Cape May City reported a mean temperature above rmal. The mean for the State was within three degrees of the ean for the August immediately preceding, whereas the aver- e difference between the two months is over six degrees. The rmest weather occurred during the first four days. The 1st d 3d were the warmest days along the coast, and the 3d at ost of the inland stations, although the maximum was delayed til the 4th at a number of stations in the northern interior. west temperatures occurred on the 19th. Frosts, ranging om light to killing, occurred in middle and northern sections om the 19th to the 22d.

Precipitation averaged well over an inch above normal. onthly rainfall totals were light along the coast, and heavy at ghtstown, Burlington, and the two Trenton stations. Other- se the rains were fairly well distributed in amount. Heavy, stained downpours broke the drought in western and north- n parts of the State in the first decade, while the generous ns of the second decade left only the south end without ample ief.

No damaging hail or wind storms were reported during the onth, but lightning on the night of the 8th, in heavy thun- rstorms, hit numerous houses and barns, and killed at least e man.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from servations of 33 stations, was 67.0°, which was 1.5° above rmal. The highest temperature was 100° at Elizabeth on the n, and the lowest, 28°, at Layton on the 21st. The greatest ily range of temperature was 49° at Layton on the 3d. The ghest monthly mean temperature was 69.3° at Jersey City, d the lowest, 64.2° at Layton.

The temperature departure from the normal for the year, 1929, date, by sections, is: The Highlands, +1.5°; Red Sandstone ain, +1.0°; Southern Interior, +1.4°; Sea Coast, +1.3°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from ob- vations of 40 stations, was 4.74 inches, which was 1.11 inches ove normal. The greatest monthly precipitation was 8.24 hes, at Hightstown, and the least, 2.12 inches at Atlantic y. The greatest amount of precipitation in any 24 consecu- e hours was 4.50 inches at Plainfield on the 8-9th. The mean the number of days on which 0.01 inch or more of precipita- n fell was 9, or 1 more than normal.

The precipitation accumulated departure from the normal for e year 1929, to date, by sections, is: The Highlands, —1.48 hes; Red Sandstone Plain, —2.69 inches; Southern Interior, 2.44 inches; Sea Coast, —5.80 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 12 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 40 miles per hour from the northeast at Atlantic City on the 22d.

MISCELLANEOUS.

The per cent of possible sunshine was 60, or 8 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.10 inches, which was 0.03 inch above normal. The highest reading observed was 30.50 inches on the 22d at Ridgefield and Sandy Hook, and the lowest was 29.70 inches on the 14th at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 1.0 foot, and the highest stage was 2.2 feet on the 18th. At Trenton the mean stage of the river was 0.5 foot, or 0.6 foot below normal. The highest stage was 1.8 feet on the 8th. From the 1st to the 7th the gage was at or below zero.

Dense fog occurred on the following dates: 7, 9, 13, 16, 24, 25, 26, 27 and 29. Thunderstorms occurred on the following dates: 1, 5, 7, 8, 9, 10, 14, 15, 19, 29 and 30. Light to heavy frosts occurred in northern and central sections on one or more days from the 19th to the 22d, inclusive. Charlotteburg and Layton reported killing frosts on the 19th, 20th and 21st.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	64.2	93	38	0.83	1.69	0.25	......	......	......	......
1886	66.9	95	36	1.13	1.76	0.86	......	......	......	......
1887	61.6	90	30	3.66	6.25	1.62	......	......	......	7
1888	63.1	*84*	29	7.09	10.65	**3.75**	......	......	14	12
1889	64.8	90	34	**8.36**	**13.13**	3.17	......	......	14	14
1890	64.4	91	33	4.75	8.61	2.59	10	10	10	10
1891	68.7	95	**39**	2.46	5.91	0.90	16	9	5	6
1892	64.2	90	33	1.81	3.78	1.02	15	11	4	6
1893	62.7	90	31	3.20	5.38	1.93	12	10	8	8
1894	68.8	97	31	7.46	11.65	3.69	10	10	10	8
1895	69.7	**109**	29	1.07	2.71	0.22	17	10	3	5
1896	65.1	95	30	4.37	8.74	2.26	19	7	4	5
1897	65.5	99	30	1.65	3.97	0.21	19	7	4	5
1898	68.6	100	31	2.00	3.87	0.65	17	8	5	6
1899	64.4	93	30	5.88	9.61	2.88	15	9	6	9
1900	69.9	98	32	2.86	7.37	1.09	14	10	6	6
1901	66.8	94	29	3.38	6.82	1.63	15	9	6	10
1902	64.6	93	30	5.65	8.95	3.11	11	7	12	13
1903	65.0	92	29	3.34	7.10	1.39	17	8	5	7
1904	64.8	93	*23*	4.79	10.08	0.89	14	10	6	7
1905	65.4	90	28	5.23	9.18	2.87	16	7	7	8
1906	68.9	94	33	2.19	4.66	0.75	15	9	6	7
1907	67.1	92	31	8.08	12.95	3.55	10	8	12	14
1908	65.7	90	29	2.09	4.13	0.95	11	10	9	3
1909	64.5	89	30	3.30	4.58	2.08	11	10	9	8
1910	67.3	97	32	2.39	3.97	1.01	12	10	8	6
1911	66.4	90	30	2.88	5.33	1.08	10	12	8	9
1912	65.9	87	28	4.47	6.76	2.68	12	7	11	10
1913	64.4	96	27	3.87	6.55	1.56	13	8	9	9
1914	64.0	99	24	*0.37*	*1.64*	*0.14*	21	6	3	3
1915	68.5	97	30	2.08	4.46	0.55	17	9	4	5
1916	65.2	98	31	2.84	5.29	1.29	20	7	3	6
1917	*61.5*	87	27	2.74	6.13	0.47	16	7	7	6
1918	62.2	90	29	3.84	6.00	2.66	14	8	8	9
1919	65.8	96	32	3.26	6.28	1.04	16	6	8	8
1920	66.8	90	30	3.87	8.53	1.67	17	8	5	7
1921	**70.2**	99	36	2.35	5.04	0.80	15	8	7	8
1922	66.7	95	27	2.26	5.22	0.59	19	5	6	4
1923	67.0	90	28	3.78	6.26	2.24	14	8	8	7
1924	62.2	99	29	5.42	8.44	2.47	13	8	9	10
1925	67.8	96	25	2.92	5.81	0.64	11	11	8	7
1926	64.5	93	32	4.18	7.09	1.53	14	6	10	10
1927	65.6	97	29	2.66	5.03	0.65	19	6	5	5
1928	62.6	90	29	4.52	9.62	1.54	12	8	10	10
1929	67.0	100	28	4.74	8.24	2.12	14	7	9	9

W. B. O. Philadelphia-10-17-29 830.

Climatological Data for September, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	67.4	+2.7	97	3	37	21	40	4.05	+0.28	0.97	0	9	17	4	9	...	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	64.3	+2.4	97	4	32	19	43	3.92	−0.50	1.43	0	12	3	10	17	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	...	...	...	...	36	19†	...	4.77	+0.23	1.51	0	11	18	4	8	e.	Brice E. Riker.
Dover	Morris	600	45	64.6	+2.4	96	4	36	19	37	4.98	+0.89	1.35	0	10	5	15	10	...	William C. Harris
Layton	Sussex	480	28	64.2	+1.9	99	3	28	21	49	5.40	+1.48	1.88	0	11	18	1	11	se.	A. M. Depue.
Long Valley	Morris	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	S. N .Dilts.
Newton	Sussex	769	45	64.5^{e}	+1.0	95^{e}	3†	34^{e}	19	40^{e}	3.49	−0.31	1.10	0	7	...	...	...	...	Irving J. Kern.
Phillipsburg	Warren	363	46	66.6	+1.4	95	3	40	21	38	7.20	+2.54	1.98	0	8	19	6	5	...	Town Engineer.
Sussex	Sussex	442	34	65.5^{b}	+1.3	97^{b}	3	33^{a}	19†	45^{b}	3.60	−0.30	0.58	0	10	16	4	10	w.	A. J. W. Mowatt.
Means and extremes	...	...	...	65.3	+1.9	99	3	28	21	49	4.68	+0.54	1.98	0	10	14	6	10	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	William Mann.
Boonton	Morris	400	§39	64.6	+1.0	95	3	35	19	44	4.75	+0.62	1.62	0	8	15	1	14	ne.	John Kline.
Chatham	Morris	185	25	...	...	...	...	...	...	...	4.24	−0.05	1.36	0	6	16	7	7	...	Paul Molitor, Sr.
Elizabeth	Union	45	50	68.2	+1.5	100	4	38	19	39	5.47	+1.70	2.47	0	10	19	2	9	sw.	Union County Park Com.
Flemington	Hunterdon	140	§43	67.8	+1.5	99	4	38	19	41	7.11	+3.21	2.46	0	11	17	5	8	e.	Hiram E. Deats.
Jersey City	Hudson	10	31	69.3	+2.1	98	3	43	19	28	3.94	+0.59	1.30	0	10	12	12	6	s.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	66.9	+1.1	97	4	36	19	32	4.36	+0.47	1.62	0	9	16	6	8	e.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	67.2	+3.1	99	4	37	19†	40	3.54	−0.04	2.29	0	8	16	5	9	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	68.0	+2.4	98	4	39	19	42	5.59	+1.99	1.75	0	9	13	13	4	n.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	...	...	...		...	...	...	3.91	...	1.13	0	8	...	...	...	...	Hackensack Water Co
Paterson	Passaic	80	58	68.6	+2.4	97	3	41	19	32	4.01	−0.12	1.69	0	9	19	1	10	sw.	Marion T. Probert.
Plainfield	Union	120	41	66.6	+1.0	99	3†	37	19	40	6.90	+2.53	4.50	0	10	14	11	5	ne.	E. D. Pearson.
Ridgefield	Bergen	80	12	67.0	...	99	3	37	19	38	3.30	...	1.32	0	8	13	9	8	s.	George P. Kirsten.
Somerville	Somerset	70	46	66.8^{b}	+0.8	99^{b}	3†	36^{b}	19	41^{b}	7.61	+3.96	4.09	0	10	16	4	10	e.	Arthur Gerlich.
South Orange	Essex	200	57	67.2	+3.1	98	3	37	19	39	4.54	+0.73	1.85	0	9	13	6	11	sw.	Everett W. Bird.
Verona	Essex	490	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	...	...	...	...	...	...	...	5.29	...	2.03	0	10	...	...	...	...	Hackensack Water Co.
New York, N. Y.	...	365	59	68.8	+2.0	94	3	44	19	26	4.05	+0.66	1.48	0	9	5	13	12	e.	U. S. Weather Bureau.
Means and extremes	...	...	...	67.4	+1.8	100	4	35	19	44	4.97	+1.30	4.50	0	9	15	6	9	e.	
The Southern Interior.																				
Belleplain	Cape May	30	35	67.2^{a}	+0.7	93	2†	36^{a}	19	41^{a}	2.42	−0.97	0.90	0	7	16	7	7	sw.	A. F. Waldron.
Bridgeton	Cumberland	90	47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Paul T. Kornman.
Burlington	Burlington	12	§43	68.7	+1.9	98	2	40	19	40	7.51	+4.00	2.84	0	10	14	5	11	s.	Public Service Power Co.
Clayton	Gloucester	130	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Harry P. Campbell.
Hightstown	Mercer	120	35	67.4	+0 6	98	3	36	19	41	8.24	+5.11	2.50	0	10	18	4	8	sw.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	68.1	+2.0	99	3	36	19	41	4.72	+0.81	1.35	0	8	12	11	7	se.	James M. Armstrong.
Lakewood	Ocean	54	25	66.4	+1.8	93	3	39	19†	32	4.61	+1.82	1.85	0	10	12	7	11	sw.	R. W. Holman.
Moorestown	Burlington	...	66	67.6	+1.6	96	3	39	19	35	6.86	+3.23	2.12	0	8	11	9	10	ne.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	...	...	...	...	...	...	...	2.60	+0.10	1.01	0	5	...	...	...	...	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	66.2	...	94	2†	37	19†	36	3.06	−0.06	1.48	0	5	21	7	2	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	...	...	...	...	...	...	...	4.37	...	2.12	0	9	17	9	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	67.8	+0.9	95	4	41	19	32	7.14	+3.74	3 60	0	10	9	8	13	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	...	...		...	...	...	...	6.72	...	3.75	0	9	...	...	...	...	Edward H. Ristow.
Tuckerton	Ocean	23	36	67.8	+1.6	98	3	37	19	36	2.77	−0.29	1.25	0	9	22	0	8	sw.	John H. Brown.
Vineland	Cumberland	109	59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	William Pfeffer.
Philadelphia, Pa.	...	117	58	70.3	+2.3	94	3	45	19	27	6.51	+3.37	3.00	0	9	11	8	11	sw.	U. S. Weather Bureau.
Means and extremes	...	...		67.5	+1.4	99	3	36	19†	41	5.08	+1.75	3.75	0	8	15	7	8	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	67.1	+0.3	92	1	43	19	29	4.31	+1.32	2.10	0	7	16	10	4	ne.	Information Bureau.
Atlantic City	Atlantic	16	56	67.6	+0.8	86	1	44	19	21	2.12	−0.53	0.98	0	5	9	12	9	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	67.2	−1.8	85	1	44	20	23	2.19	−0.81	1.07	0	8	13	8	9	ne.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	67.4	+1.5	96	3	42	19	30	3.04	−0.02	0.84	0	9	10	11	9	ne.	William D. Martin.
Sandy Hook	Monmouth	22	31	68.1	+1.0	93	3	49	19	25	4.89	+1.46	1.98	0	10	12	7	11	sw.	U. S. Weather Bureau.
Means and extremes	...	...	...	67.5	+0.4	96	3	42	19	30	3.31	+0.28	2.10	0	8	12	10	8	ne.	
For the State	...	...	...	67.0	+1.5	100	4	28	21	49	4.74	+1.11	4.50	0	9	14	7	9	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for September, 1929

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
elvidere	Delaware					.30	.26		.73	.68	.08				.57	.23		.97												.23	T.		4.05
harlotteburg	Passaic		.02				.50	.10	1.43	.22	.04	.02			.65	.38		.40	.13												.03		3.92
ulvers Lake	Delaware					.02	.48	.01	1.51	.22	.53			T	.63	.87		.41												.05	.04		4.77
over	Passaic						.60		1.35	.33	.02				1.04			1.50												.11	.03		4.98
ayton	Delaware					.86	.14	.08	1.85	.03	.27				1.30	.03		.40												.42	.02		5.40
ong Valley																																	
ewton	Delaware					.31	.30		1.10						.75	.65		.36	.02														
hillipsburg	...do					.58	.08	1.98	.56	1.95				T.	.78			1.19												T.	.08		7.20
ussex	Hudson						.41		.51	.38	.51				.58	.46		.55	.02											.12	.06		3.60
The Red Sandstone Plain.																																	
ayonne	Coast																																
oonton ‖	Passaic						.37	.03	1.62	.26	.62				.48	.16			1.21												T		4.75
hatham ‖	...do						.44		1.36	1.12				T.	.17	.13		1.02													T.		4.24
lizabeth	Coast					.05	.69		2.47	1.54	.01			.13	.20	.02		.09	T.												.27		5.47
lemington	Raritan					.41	.85		2.46	1.74	.02			T.	.56	.20		.37	.26											T	.24		7.11
ersey City	Coast					.18	.45	.15	1.30	.64	T.			.04	.65	T.		.18	.01												.34		3.94
ambertville	Delaware					T.	.87		1.62	.25	.29			T.	.21	.16		.23												.03	.70		4.36
ittle Falls.‖	Passaic		.01				.34	.01	1.40	.89					.32	.02			.55														3.54
ew Brunswick	Raritan					.12	.80		1.75	1.52	T.	T.		.05	.76	.05	T.	.10	T.												.44		5.59
ew Milford.**	Hackensack					.06	.51	1.13	.84	.69				.02	.11			.55															3.91
aterson	Passaic	.07				T.	.35		.80	1.69				.05	.19			.25	.58												.03		4.01
lainfield	Raritan					.07	.56	1.00	2.17	2.33	.01				.17			.25												.04	.30		6.90
idgefield**	Hackensack					.02	.38	*	.81	1.32				.01	.20	T.		.55													.01		3.30
omerville	Raritan					.21	.83		4.09	1.38	*				.19	.22		.47													.22		7.61
outh Orange	Rahway					T.	.60		1.12	1.85				.10	.12	.02		.11	.52												.10		4.54
erona**	Passaic																																
oodcliff Lake**	Hackensack					.30	.40	1.21	1.98	.05				.07	.31			.84	.09												.04		5.29
ew York, N. Y***	Coast					.35	.27	1.35	.19	.56	T.			.06	.78	T.		.19	T.												.33		4.05
The Southern Interior.																																	
elleplain	Tuckahoe					.90	.20					.07			.73			.04	.08												.40		2.42
ridgeton	Coast																																
urlington	Delaware					.12	.58		1.86	2.84		.13			.80	.42		.13	.02											T.	.61		7.51
layton	Delaware																																
ightstown	Raritan					1.40	1.10	*	2.25	2.00	.10				.35	.12		.22												T.	.70		8.24
dian Mills	Mullica					.30	1.35	.10	.16		.65				.48			.50													1.18		4.72
akewood	Metedeconk					1.00	.85	T.	1.15	.07	.36			.13	.21			.12	.07												.65		4.61
oorestown‖	Delaware						1.48	.02	2.12	1.94		.16			.38	.24		T.	.52												T.		6.86
orthfield	Coast					.45	.48					.56			1.01																.10		2.60
leasantville‖	Coast						1.15					.40			.08	1.40			.03														3.06
unyon	Coast					.27	.76	.12	2.00					.14	.26	.07		.17													.58		4.37
renton***	Delaware					.75	.18	2.14	1.98	.25	.08			T.	.74			.28												.15	.59		7.14
renton No. 2‖	Delaware					T.	1.05	.03	3.75	.72		.06			.52	.26		T.	.19											T.	.14		6.72
uckerton	Coast					.30	.95			.03		.26			.36	.60		.02	.23												.02		2.77
ineland	Maurice																																
hila., Pa***	Delaware					.82	.23	.25	2.94	.07	.12			T	1.01			.24											T.	T.	.83		6.51
The Sea Coast.																																	
sbury Park	Coast					.10		.15	.15	T.	.20				2.10	T.		1.10													.51		4.31
tlantic City***	...do					.63					.10			T.	.98			.03	T.				T.								.38		2.12
ape May City	...do					.18	T.		T.		.08	.51			1.07	T.		.05	.02				.17	T.							.11		2.19
ong Branch	...do																																
andy Hook***	...do					.58	.11	1.57	.59	.62	.03			.01	.53			.09												T.	.76		4.89

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Highest			Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
							Miles per hour	Direction	Date				
lantic City	30.10	30.40	22	29.78	14	14.8	40	ne.	22	83	75	82	53
ong Branch	30.10	30.48	22	29.70	14					77	66	73	
oorestown										92	65	86	
w York, N. Y	30.10	30.51	22	29.78	14	10.7	37	nw.	11	75	61	70	65
iladelphia, Pa	30.12	30.47	22	29.75	14	10.6	44	sw.	8	76	57	68	61
dgefield	30.10	30.50	22	29.78	14								
ndy Hook	30.09	30.50	22	29.75	14	11.7	34	n.	18	82	65	76	60
enton	30.10	30.47	22	29.77	14	8.0	32	sw.	7	80	59	72	66
erona													

Daily Temperatures for September, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	92	93	97	94	84	80	80	84	90	89	76	77	80	85	78	80	74	69	66	65	68	67	78	86	85	85	83	74	84	70	....	80.4
	Minimum	55	61	57	60	67	65	65	67	67	69	55	42	56	65	52	48	61	52	38	38	37	40	44	46	47	52	57	54	59	55	....	54.4
Charlotteburg	Maximum	92	94	96	97	94	78	87	87	85	87	85	72	73	82	76	76	75	68	61	61	63	65	75	80	82	83	80	77	84	79	....	79.8
	Minimum	51	56	55	54	63	62	57	58	67	63	56	36	45	45	45	38	54	53	32	35	34	35	36	39	39	46	51	50	54	55	....	48.8
Dover	Maximum	90	92	94	96	83	73	85	80	83	85	76	70	69	78	71	75	70	64	63	60	60	60	70	78	80	80	76	70	79	71	....	76.0
	Minimum	57	61	62	61	65	64	61	69	69	70	49	41	52	58	51	43	60	46	36	37	38	41	45	41	45	51	52	55	59	53	....	53.1
Layton	Maximum	93	98	99	95	83	76	87	85	83	86	71	72	72	81	75	76	72	67	62	62	62	65	75	79	82	82	79	72	82	67	....	78.0
	Minimum	48	56	50	51	65	64	64	65	65	70	61	39	49	56	47	44	57	50	29	30	28	34	36	43	46	53	54	52	55	52	....	50.4
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Newton	Maximum	90	93	95	95	81	75	85	83	....	....	....	....	....	80	72	75	71	66	61	59	61	63	71	78	81	81	78	71	82	69	....	76.6e
	Minimum	50	61	62	63	65	62	65	63	....	....	....	....	....	63	50	48	60	49	34	38	35	38	43	44	48	54	55	54	53	52	....	52.4e
Phillipsburg	Maximum	92	94	95	92	84	76	86	82	87	87	73	74	76	82	74	78	74	65	65	63	65	64	75	79	83	82	79	76	83	67	....	78.4
	Minimum	54	61	57	59	68	65	64	68	69	69	51	44	56	61	52	47	61	53	44	41	40	42	47	47	45	51	56	54	59	56	....	54.7
Sussex	Maximum	92	93	97	94	79	78	88	85	86	87	72	....	75	81	76	78	72	68	65	62	64	....	76	81	83	83	80	73	81	70	....	79.2b
	Minimum	51	57	52	54	66	63	63	65	65	69	53	39	51	64	49	41	59	52	33	36	33	....	36	41	42	47	55	54	59	54	....	51.8a
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boonton§§	Maximum	91	92	95	93	78	77	88	83	86	86	71	75	72	80	76	77	72	65	63	63	65	65	75	78	84	84	80	71	79	63	....	77.6
	Minimum	54	59	56	57	64	63	59	62	68	68	58	40	46	60	50	42	46	54	35	37	40	42	47	37	40	43	49	53	57	59	....	51.5
Elizabeth	Maximum	95	97	99	100	84	78	88	82	87	90	78	76	72	84	78	79	73	70	64	65	65	63	72	82	85	82	79	75	78	71	....	79.7
	Minimum	58	64	60	62	75	64	64	69	70	70	60	49	62	68	54	51	60	57	38	43	44	46	51	44	47	53	56	58	58	45	....	56.7
Flemington	Maximum	94	98	97	99	85	76	89	85	89	88	76	78	76	83	79	83	75	70	63	63	63	62	76	83	85	83	80	76	80	73	....	80.2
	Minimum	58	65	58	60	66	65	63	69	70	69	58	46	55	66	54	47	59	56	38	41	41	44	49	42	45	51	55	55	60	56	....	55.4
Jersey City	Maximum	92	95	98	97	82	78	87	82	84	86	75	72	74	77	75	78	74	69	64	62	63	63	72	80	81	82	78	72	75	70	....	77.9
	Minimum	64	72	71	72	66	65	69	69	69	71	62	59	62	62	58	60	65	49	43	48	47	50	54	55	56	62	62	60	59	59	....	60.7
Lambertville	Maximum	91	95	95	97	83	74	87	78	85	88	73	73	78	81	73	78	74	70	62	61	62	62	71	79	82	79	77	73	76	67	....	77.5
	Minimum	60	68	66	65	68	64	65	68	69	69	51	49	57	65	53	49	61	55	36	40	40	43	48	50	51	53	57	55	59	55	....	56.3
Little Falls§§	Maximum	94	96	98	99	78	80	89	87	88	89	74	76	73	84	78	80	74	67	64	64	65	66	77	83	85	85	81	76	83	63	....	79.9
	Minimum	57	62	60	61	67	64	62	66	67	70	60	44	54	63	52	46	54	60	37	37	38	42	49	44	45	51	52	55	58	60	....	54.6
New Brunswick	Maximum	94	95	96	98	87	76	88	83	90	89	83	73	74	81	75	80	74	76	63	63	64	63	71	80	88	81	78	75	76	74	....	79.6
	Minimum	58	64	60	62	67	65	63	68	70	71	60	49	58	64	55	50	60	59	39	42	41	46	50	43	46	52	55	57	59	57	....	56.3
Paterson	Maximum	92	94	97	95	89	80	85	85	82	88	82	73	72	82	74	77	72	72	63	63	65	65	73	79	80	82	78	73	80	72	....	78.8
	Minimum	62	68	68	70	68	65	66	70	69	71	60	50	56	67	55	52	62	59	41	43	43	45	50	47	52	56	57	58	60	58	....	58.3
Plainfield	Maximum	93	97	99	99	80	78	89	82	85	86	77	72	75	77	75	79	75	70	63	61	61	63	72	81	82	82	79	79	76	70	....	78.6
	Minimum	56	61	59	60	66	64	63	68	68	69	59	45	58	60	57	47	50	49	37	38	40	45	49	42	46	49	59	56	55	60	....	54.5
Ridgefield	Maximum	94	96	99	97	74	79	88	84	80	90	74	74	73	81	76	78	73	67	62	64	64	64	70	81	82	81	77	72	77	66	....	77.9
	Minimum	60	64	63	64	67	64	66	69	69	70	50	46	61	60	54	49	64	59	37	41	39	45	50	43	48	52	55	58	58	59	....	56.1
Somerville	Maximum	94	98	99	99	84	77	85	87	85	85	....	....	77	80	82	78	74	67	65	64	65	64	74	80	84	84	80	74	79	71	....	79.8b
	Minimum	55	63	58	59	65	60	62	65	70	....	....	45	57	52	55	45	60	55	36	42	45	43	49	42	43	51	55	56	59	56	....	53.7b
South Orange	Maximum	94	95	98	96	85	77	88	87	85	89	84	77	70	81	77	78	75	72	67	64	67	64	73	80	83	83	78	75	78	74	....	79.8
	Minimum	56	62	59	61	65	64	62	68	68	67	55	44	53	66	51	48	58	57	37	40	41	44	48	42	46	51	55	55	57	56	....	54.5
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
New York, N. Y.	Maximum	91	92	94	94	79	77	85	82	82	86	73	71	73	76	74	76	73	67	62	62	63	63	71	77	80	81	77	69	73	69	....	76.4
	Minimum	65	73	71	73	66	66	70	69	70	72	62	60	62	62	58	60	66	49	44	48	48	50	54	56	57	62	63	60	60	56	....	61.1
The Southern Interior.																																	
Belleplain	Maximum	90	93	93	92	80	80	92	91	90	90	80	78	84	75	77	81	80	73	64	62	65	64	79	74	80	85	76	74	80	69	....	79.7
	Minimum	54	62	62	60	....	67	67	70	71	74	57	45	62	67	53	42	60	46	36	44	42	49	44	57	40	44	41	51	60	57	....	54.6a
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Burlington	Maximum	92	98	96	95	89	80	89	89	90	90	89	75	84	85	83	80	78	76	65	64	64	64	72	79	84	88	80	78	80	78	....	81.8
	Minimum	60	62	62	59	58	63	62	63	63	72	60	51	60	62	55	47	61	60	40	44	44	47	46	42	44	49	56	60	59	57	....	55.6
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hightstown	Maximum	94	96	98	97	89	78	89	90	92	89	78	76	86	81	77	80	76	74	65	66	66	63	74	80	83	84	80	79	80	77	....	81.2
	Minimum	58	62	58	56	68	64	58	64	65	72	57	43	48	59	53	46	63	57	36	37	41	45	50	42	42	48	49	54	59	55	....	53.6
Indian Mills	Maximum	93	96	99	97	81	76	92	88	91	91	75	76	84	80	76	84	76	68	61	64	64	68	72	83	84	85	77	79	83	74	....	80.6
	Minimum	58	62	60	57	66	67	65	68	72	71	58	47	59	68	54	45	60	59	36	38	42	47	55	42	44	48	47	56	59	57	....	55.6
Lakewood	Maximum	89	92	93	91	84	76	87	82	86	88	84	71	80	77	72	74	79	75	62	60	61	62	66	73	76	76	73	69	78	69	....	76.8
	Minimum	57	66	65	63	65	65	62	68	69	71	58	47	57	68	55	47	58	59	39	39	42	52	56	44	44	47	49	54	57	58	....	56.0
Moorestown	Maximum	93	95	96	94	79	75	90	83	89	89	71	74	83	80	75	78	76	66	62	63	64	63	71	79	81	83	77	75	83	69	....	78.5
	Minimum	59	66	63	61	67	66	66	70	71	72	59	49	60	62	54	50	63	47	39	43	44	46	50	44	49	51	55	58	60	57	....	56.7
Pleasantville§§	Maximum	92	94	94	91	81	80	87	82	86	86	74	75	83	73	77	78	80	80	64	64	64	63	67	72	74	77	72	69	74	66	....	77.3
	Minimum	56	62	64	61	65	68	69	69	70	70	57	50	57	57	54	45	55	55	37	37	42	42	57	42	41	48	47	55	59	61	....	55.1
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trenton	Maximum	91	94	95	95	80	75	87	79	89	88	72	74	83	81	73	78	75	66	62	61	61	61	69	79	82	82	77	74	77	67	....	77.6
	Minimum	61	68	67	67	65	65	65	68	70	72	57	54	60	62	57	54	64	48	41	44	44	45	52	49	50	57	58	59	60	54	....	57.9
Tuckerton	Maximum	92	94	98	96	85	80	87	88	87	85	78	76	84	78	78	78	79	73	65	65	62	63	70	75	76	78	74	68	78	67	....	78.6
	Minimum	57	64	62	60	67	68	69	70	70	70	55	49	65	66	52	50	63	57	37	39	42	55	56	45	44	50	49	57	59	59	....	56.9
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Philadelphia, Pa.	Maximum	92	93	94	92	77	75	89	84	89	89	74	77	85	82	75	80	77	67	63	65	66	63	75	79	80	83	80	77	82	70	....	79.1
	Minimum	65	70	70	70	69	67	69	70	72	73	63	58	65	63	61	60	66	52	45	47	47	49	55	57	56	61	64	62	62	57	....	61.5
The Sea Coast.																																	
Asbury Park	Maximum	92	86	89	85	79	75	78	80	79	87	74	71	75	74	75	77	80	71	63	64	61	63	67	70	75	74	74	68	68	78	....	75.1
	Minimum	63	69	69	67	60	61	63	64	65	66	60	57	67	62	56	56	67	51	43	51	53	55	52	51	51	54	60	60	59	60	....	59.1
Atlantic City	Maximum	86	84	82	81	78	78	80	78	80	79	75	73	79	74	75	76	76	68	60	60	60	62	65	68	68	72	69	65	68	68	....	72.9
	Minimum	65	70	70	71	70	70	72	74	74	73	62	61	70	63	60	62	67	51	44	47	51	59	60	53	50	55	58	62	61	60	....	62.2
Cape May City	Maximum	85	83	82	82	75	80	81	84	82	80	75	77	80	73	73	76	81	67	64	66	64	63	69	72	66	75	67	67	70	68	....	74.2
	Minimum	66	68	69	68	69	69	72	72	73	71	57	54	70	65	58	54	66	51	45	44	48	56	56	50	47	53	54	59	61	60	....	60.2
Long Branch	Maximum	90	88	96	90	76	75	81	79	83	87	75	70	72	73	74	72	80	69	60	63	60	61	65	70	74	81	77	70	77	66	....	75.1
	Minimum	70	68	66	66	68	67	66	70	70	72	55	54	64	61	54	54	65	52	42	60	50	52	58	48	47	58	60	57	60	54	....	59.6
Sandy Hook	Maximum	89	92	93	91	76	76	80	78	80	86	75	70	72	74	74	72	76	68	61	61	62	62	66	75	77	74	75	66	75	67	....	74.8
	Minimum	65	69	68	69	66	66	68	69	70	74	64	62	66	63	62	64	67	52	49	50	50	52	55	54	56	59	61	59	59	53	....	61.4

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.224	.288	.224	.160	.030	.096	.144	.144	.224	.272	.240	.192	.144	.088	.160	.128	.062	.144	.160	.160	.144	.096	.128	.160	.128	.144	.064	.080	*	.116	....	4.344
	Wind movement	40	50	42	30	63	27	56	42	71	85	51	99	83	*	56	46	37	81	68	48	112	89	51	46	24	29	38	43	42	79	....	1628
Runyon	Evaporation	.120	.150	.180	.200	.070	.060	.120	.050	.120	.180	.180	.180	.140	.140	.190	.180	.020	.150	.150	.150	.140	.135	.140	.140	.140	.140	.146	.120	.120	.040	....	3.991
	Wind movement	16	10	25	12	15	17	7	9	36	46	45	35	20	25	16	21	43	17	18	37	52	62	55	25	25	23	29	21	20	28	....	812

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

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VOL. XXXIV. OCTOBER, 1929. No. 10

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Last month we remarked, "This was the warmest September since that of 1925." This month we may say, "This was the coolest October since that of 1925." October, 1925, incidentally, was the coolest month of that name in our record. It averaged more than 3 degrees cooler than this month. The highest temperature reported during October, this year, was 80°. So low a maximum for the State has not occurred since 1911, but a lower maximum is on record in 1888. All stations had monthly mean temperatures that were below normal, the deficiencies ranging from 1.2° at Atlantic City, to 5.0° at Long Branch. The warmest days were the 7th and 20th; the coldest was the 11th. At a number of stations the same minimum occurred on the 10th and 11th, with freezing weather generally except at shore stations.

Traces of snow were observed at numerous stations, but the heavy average monthly precipitation, 4.61 inches, which was nearly an inch above normal, included no snowfalls producing as much as an .01 inch of water. Culvers Lake, in the extreme north, and Cape May City, in the extreme south, had monthly totals below normal; all other stations were above normal.

No damaging wind or hail storms were reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 34 stations, was 52.3°, which was 2.6° below normal. The highest temperature was 80° at Indian Mills on the 20th, and the lowest, 17°, at Charlotteburg on the 11th. The greatest daily range of temperature was 48° at Charlotteburg on the 11th and at Layton on the 19th. The highest monthly mean temperature was 56.0° at Cape May City, and the lowest, 48.6° at Sussex.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +1.1°; Red Sandstone Plain, +0.7°; Southern Interior, +1.0°; Sea Coast, +0.9°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 41 stations, was 4.61 inches, which was 0.93 inch above normal. The average total snowfall was a trace. The greatest monthly precipitation was 7.35 inches at Charlotteburg, and the least, 2.62 inches at Cape May City. The greatest amount of precipitation in any 24 consecutive hours was 3.36 inches at Belvidere on the 2d. The mean number of days on which 0.01 inch or more of precipitation fell was 8, or the normal number.

The precipitation accumulated departure from the normal for the year 1929, to date, by sections, is: The Highlands, —0.61 inch; Red Sandstone Plain, —1.75 inches; Southern Interior, —1.34 inches; Sea Coast, —5.15 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 14 miles per hour, which was 3 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 60 miles per hour from the east at Atlantic City on the 2d. High winds also occurred over the State on the 3d, 17th, 18th and 22d.

MISCELLANEOUS.

The per cent of possible sunshine was 61, or 2 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.05 inches, which was 0.02 inch below normal. The highest reading observed was 30.74 inches on the 10th at Trenton, and the lowest was 29.39 inches on the 2d also at Trenton. Records for high pressure for the month of October were broken generally on the 10th.

The mean stage of the Delaware River at Phillipsburg was 2.4 feet, and the highest stage was 6.3 feet on the 4th. The mean stage at Trenton was 1.4 feet, or the normal mean stage. The highest stage was 3.4 feet on the 5th.

Dense fog occurred in scattered sections on the 7th, 21st, and 30th, and generally on the 31st. Thunderstorms were reported at some stations on the 16th and 17th. Light hail fell at Dover on the 17th and at Jersey City and Verona on the 16th. Frost, mostly light, occurred on the 5th, and killing frosts occurred generally, except along most of the immediate coast, on either the 9th, 10th or 11th. These were the first killing frosts of the season, except in extreme northern sections where killing frosts were reported last month.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	54.2	82	**29**	4.20	5.85	2.91	.....	.....	.....	.....
1886	55.6	88	21	3.22	8.16	2.02	.....	.....	.....	.....
1887	52.3	89	21	2.61	5.00	1.58	.....	.....	.....	7
1888	49.2	*73*	25	4.73	7.00	2.97	.....	.....	10	12
1889	50.8	82	23	3.80	5.03	2.42	.....	.....	12	11
1890	53.9	81	24	6.33	10.18	3.40	9	8	14	13
1891	52.8	92	18	3.44	5.57	1.88	11	11	9	8
1892	53.6	85	21	0.52	*1.09*	0.04	14	12	5	4
1893	55.2	85	17	4.22	6.59	1.74	15	7	9	7
1894	55.3	87	27	5.67	8.23	3.90	12	7	12	10
1895	49.9	83	18	3.60	5.53	1.62	19	7	5	5
1896	51.5	82	21	2.24	4.58	1.72	11	8	12	8
1897	55.8	**95**	22	2.43	6.49	0.87	14	8	9	7
1898	56.5	88	24	5.76	8.42	3.92	13	9	9	10
1899	56.6	86	18	2.72	4.65	1.07	13	10	8	6
1900	**59.9**	92	19	3.70	6.59	1.47	10	8	13	10
1901	54.4	82	21	1.93	4.45	0.87	17	8	6	4
1902	56.0	80	20	6.39	9.35	3.82	15	7	9	8
1903	55.9	86	24	**8.92**	**16.19**	4.17	13	9	9	8
1904	51.9	89	15	3.78	7.01	1.50	20	6	5	5
1905	55.5	90	17	2.71	4.83	0.75	18	7	6	7
1906	55.0	80	*11*	4.46	7.14	2.66	8	9	14	11
1907	50.6	80	18	4.46	7.18	2.70	22	5	4	7
1908	57.3	92	19	2.71	5.14	1.30	15	5	11	9
1909	51.2	84	18	1.18	1.82	0.40	17	7	7	8
1910	57.2	90	18	3.15	5.55	1.55	15	8	8	7
1911	53.9	80	18	5.49	8.23	2.61	10	9	12	12
1912	57.0	88	25	3.30	6.95	1.72	17	8	6	5
1913	57.8	83	25	7.79	13.84	2.70	12	9	10	11
1914	58.1	88	19	1.99	3.08	0.90	13	9	9	5
1915	56.2	84	23	3.03	5.18	1.89	17	7	7	9
1916	55.1	92	23	1.37	2.38	0.51	18	8	5	4
1917	50.7	84	22	6.99	9.74	**4.28**	15	8	8	10
1918	57.0	84	22	1.25	2.36	0.74	16	9	6	8
1919	59.0	92	25	3.43	4.97	2.01	9	8	14	13
1920	59.0	87	28	1.80	4.53	0.55	20	5	6	5
1921	54.1	82	16	0.97	2.18	0.33	18	7	6	5
1922	56.6	92	18	1.48	2.70	0.55	19	6	6	7
1923	53.9	81	21	4.25	6.37	2.35	16	8	7	8
1924	54.4	84	16	*0.31*	2.76	*T.*	23	6	2	1
1925	*49.1*	84	12	4.59	5.78	3.38	9	9	13	11
1926	53.1	90	17	4.08	6.03	1.79	13	8	10	11
1927	56.8	94	23	7.82	14.07	2.81	18	5	8	10
1928	56.1	90	16	1.19	2.58	0.24	17	9	5	6
1929	52.3	80	17	4.61	7.35	2.62	15	8	8	8

W. B. O. Philadelphia-11-23-29-830.

Climatological Data for October, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr: Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Precipitation in inches: Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	No. of days: Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy	Prevailing direction of wind	Observers
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	51.6	−2.2	76	20†	26	11	42	5.65	+1.98	3.36	T.	7	15	5	11	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	49.6	−2.0	73	7	17	11	48	7.35	+2.88	3.28	T.	9	4	7	20	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	.....	.....	.....	.....	27	11	....	3.25	−0.93	1.32	0	10	12	8	11	e.	Brice E. Riker.
Dover	Morris	600	45	49.3	−2.0	72	20	23	11	40	4.88	+0.81	2.69	T.	8	5	20	6	......	William C. Harris
Layton	Sussex	480	28	49.1	−2.4	74	20	20	11	48	3.88	+0.26	1.76	T.	6	12	7	12	ne.	A. M. Depue.
Long Valley	Morris	.....	....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	.....	S. N. Dilts.
Newton	Sussex	769	45	50.6	−1.9	75	20	27	11	40	3.81	+0.18	1.93	T.	8	6	8	17	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	51.4	−2.5	73	7†	30	10†	36	4.84	+1.28	3.21	0	6	19	7	5	......	Town Engineer.
Sussex	Sussex	442	34	48.6^b	−4.6	76^b	20	19^b	11	47^b	3.95	+0.51	1.80	T.	10	17	8	6	n.	A. J. W. Mowatt
Means and extremes	......	......	....	50.0	−2.5	76	20†	17	11	48	4.70	+0.87	3.36	T.	8	11	9	11	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	31	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	..	....	....	....	.....	William Mann.
Boonton	Morris	400	§39	49.2	−3.6	75	21	21	11	42	4.86	+0.95	1.90	......	6	15	3	13	sw.	John Kline.
Chatham	Morris	185	25	.....	.....	.....	.....	.....	.....	....	5.39	+1.18	1.87	0	7	19	5	7	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	52.3	−3.1	74	27	30	10†	38	4.26	+0.37	2.05	0	7	24	1	6	nw.	Union County Park Com.
Flemington	Hunterdon	140	§43	52.9	−3.1	77	20†	29	11†	43	4.21	+0.55	2.27	T.	7	20	4	7	n.	Hiram E. Deats.
Jersey City	Hudson	10	31	54.4	−1.9	74	7	34	18	23	5.18	+1.50	2.09	T.	7	10	15	6	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	51.6	−3.0	72	7†	30	10†	30	4.85	+1.37	1.88	0	11	19	4	8	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	52.0	−2.9	78	20	26	11	42	6.37	+1.86	2.64	0	8	15	7	9	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	53.4	−1.8	77	20	28	11	38	4.11	+0.53	1.80	0	9	15	10	6	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	.....	.....	.....	.....	.....	.....	....	3.50	......	1.70	.....	7	....	....	....	.....	Hackensack Water Co
Paterson	Passaic	80	58	53.2	−2.0	74	7†	33	10†	37	4.62	+0.53	2.42	T.	11	20	4	7	nw.	Marion T. Probert.
Plainfield	Union	120	41	51.6	−2.6	77	7	27	11	40	4.71	+0.56	2.32	T.	8	12	13	6	nw.	E. D. Pearson.
Ridgefield	Bergen	80	12	51.8	.....	75	7	27	11	35	4.08	......	2.04	T.	5	14	10	7	nw.	George P. Kirsten.
Somerville	Somerset	70	46	51.8	−2.5	75	7†	26	11	42	3.82	+0.38	1.67	0	7	15	10	6	w.	Arthur Gerlich.
South Orange	Essex	200	57	51.7	−1.7	75	20†	27	10†	41	5.35	+1.51	2.51	T.	8	18	4	9	w.	Everett W. Bird.
Verona	Essex	490	3	51.2	......	71	7†	29	10†	32	5.34	......	2.89	T.	7	11	14	6	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	.....	......	.....	.....	.....	.....	....	4.76	......	2.66	......	7	....	....	....	.....	Hackensack Water Co.
New York, N. Y.	......	365	59	54.0	−2.3	73	7	34	18	25	5.16	+1.63	2.25	T.	7	9	12	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	52.1	−2.6	78	20	21	11	43	4.71	+0.94	2.89	T.	8	16	8	7	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	35	53.4	−2.9	78	7†	21	11	45	3.90	+0.48	1.51	0	7	14	7	10	n.	A. F. Waldron.
Bridgeton	Cumberland	90	47	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	.....	Paul T. Kornman.
Burlington	Burlington	12	§43	54.4	−3.8	78	20†	27	11	36	4.73	+1.08	1.62	0	9	13	9	9	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	.....	Harry P. Campbell.
Hightstown	Mercer	120	35	52.3	−2.9	79	20	25	11	44	4.03	+0.32	1.17	0	7	16	8	7	nw.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	53.0	−2.5	80	20	24	11	45	5.28	+1.84	1.74	T.	9	11	14	6	sw.	James M. Armstrong.
Lakewood	Ocean	54	25	52.0	−3.1	76	20	26	11	39	5.20	+1.61	2.02	0	9	15	6	10	sw.	R. W. Holman.
Moorestown	Burlington	......	66	52.6	−2.1	78	7†	30	11	40	4.19	+0.62	2.08	0	8	14	9	8	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	.....	.....	.....	.....	.....	.....	....	4.93	+2.15	1.52	0	8	....	....	....	.....	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	52.8	......	79	7	25	11	44	4.65	+1.21	1.95	......	8	20	6	5	w.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	.....	.....	.....	.....	.....	.....	....	5.19	......	2.35	......	5	23	3	5	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	53.2	−2.4	75	20	34	18	30	3.51	+0.73	1.37	0	9	9	12	10	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	.....	.....	.....	.....	.....	.....	....	4.44	......	1.21	0	10	....	....	....	.....	Edward H. Ristow.
Tuckerton	Ocean	23	36	54.5	−1.6	78	13	29	9†	38	4.53	+1.00	1.24	0	11	18	2	11	nw.	John H. Brown.
Vineland	Cumberland	109	59	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	.....	William Pfeffer.
Philadelphia, Pa.	......	117	58	55.8	−2.0	77	7	37	18	27	3.59	+0.78	2.04	0	8	9	12	10	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	53.1	−2.7	80	20	21	11	45	4.55	+1.10	2.35	T.	8	15	8	8	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	54.5	−1.3	77	7	34	18	30	3.75	+0.04	1.10	0	6	22	5	4	nw.	Information Bureau.
Atlantic City	Atlantic	16	56	55.7	−1.2	78	7	35	18	22	4.30	+1.10	2.00	0	9	14	10	7	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	56.0	−3.6	77	7	37	11	25	2.62	−0.68	1.29	0	7	13	12	6	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	51.3	−5.0	72	7	31	11†	32	5.92	+1.87	2.89	T.	7	12	10	9	w.	William D. Martin.
Sandy Hook	Monmouth	22	31	54.2	−2.8	72	7	37	18	22	4.72	+0.94	1.89	0	7	11	10	10	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	54.3	−2.8	78	7	31	11†	32	4.26	+0.65	2.89	T.	7	14	10	7	w.	
For the State	......	......	....	52.3	−2.6	80	20	17	11	48	4.61	+0.93	3.36	T.	8	15	8	8	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfouudland.

Daily Precipitation for October, 1929

Stations	Drainage Basin	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		3.36	.08												T.	T.	T.					1.20	.65	T.	.03					.22	.11	5.65
Charlotteburg	Passaic		3.28	.24													.11	.08					1 29	2.08		.01					.08	.18	7.35
Culvers Lake	Delaware	.01	1.32	.18													.04	.03					1.08	.38	T	.01					.05	.15	3.25
Dover	Passaic	*	2.69	.05										.01		.10		T.					1.79								.14	.10	4.88
Layton	Delaware		1.76	.14														T.					1.63	.03							.20	.12	3.88
Loug Valley																																	
Newton	Delaware	T.	1.93	.13										T.			.04	.09					1.20	.19							.11	.12	3.81
Phillipsburg	...do	.08	3.21	.03												T.	T.						1.16		T.						.27	.09	4.84
Sussex	Hudson		1.80	.07				.04						.04			.13	.04					1.67			.02					.09	.05	3.95
The Red Sandstone Plain.																																	
Bayonne	Coast																																
Boonton ‖	Passaic	.02	1.02	1.68	T.												.12	T.	T.				T	1.90		T.					T.	.12	4.86
Chatham ‖	...do	.12	1.20	1.87	.06												.72	T.					T.	1.62							T.	.30	5.39
Elizabeth	Coast	.20	2.05													.01	.09						.86								.90	.15	4.26
Flemington	Raritan	.13	2.27	T.	T.									T.			.18	T.					.69	.41	T.						.40	.13	4.21
Jersey City	Coast	.25	2.09	T.	T.									T.		.23	.38	T.					1.95		T						.14	.14	5.18
Lambertville	Delaware	.38	1.88	.06	.06									.02			.19						1.53	.03		.03					.55	.12	4.85
Little Falls.‖	Passaic	.04	1.25	2.01													.25	.02	.01					2.64								.15	6.37
New Brunswick	Raritan	.30	1.80	.02	.02											T.	.43	T.					.80	.26		T.					.33	.15	4.11
New Milford.**	Hackensack	.15	1.70													.16	.08						1.19								.06	.16	3.50
Paterson	Passaic	.03	2.42	.03	T.											T.	.30	.02					.93	.60	.02	.02					.10	.15	4.62
Plainfield	Raritan	.24	2.82	.02										T.		.05	.32	T.					1.39								.25	.12	4.71
Ridgefield**	Hackensack	.10	2.04	T.	T.												.40	T.					1.33		T.						T.	.21	4.08
Somerville	Raritan	.15	1.67	T.												T.	.16	T.					1.30			.03					.36	.15	3.82
South Orange	Rahway	.20	*	2.51													.31	.03					.72	1.28							.18	.12	5.35
Verona**	Passaic	.18	2.76													.20	.07	T.					1.89		T.						.11	.13	5.34
Woodcliff Lake**	Hackensack	.12		2 66												.11	.06						1.57								.11	.13	4.76
New York, N. Y***	Coast	.43	1.94	T.	T.									T.		.55	.17	T.					1.82		T.						.14	.11	5.16
The Southern Interior.																																	
Belleplain	Tuckahoe	.55	1.51		.12												T.	.10					.60								.28	.74	3.90
Bridgeton	Coast																																
Burlington	Delaware	.32	1.62	.01	.13												.33						1.02	.55							.33	.42	4.73
Clayton	Delaware																																
Hightstown	Raritan	.32	1.17	T.	.11											T.	.62						1.02		T.						.52	.27	4.03
ndian Mills	Mullica	.60	1.26	.05	.12												.43	.02					1.74								.38	.68	5.28
Lakewood	Metedeconk	.42	2.02	.02	T.											.03	.44						1.00	.45							.42	.40	5.20
Moorestown‖	Delaware	.18	2.08	.27	T.	.09		T.				T.					.26							.58							.14	.59	4.19
Northfield	Coast	.86	1.52		.09												.08	.23					1.13								.36	.66	4.93
Pleasantville‖	Coast	.42	1.95			.08											.09	.29						.85							.01	.96	4.65
Runyon	Coast	.41	2.35														.63						1.32								.48		5.19
Trenton***	Delaware	.47	.94	.01	.07									T.		.22	.06	T.					1.10		T.	T.					.48	.16	3.51
Trenton No. 2‖	Delaware	.52	1.17	.39	.05	.07											.33						.05	1.21		T.					.11	.54	4.44
Tuckerton	Coast	.80	1.24		.03											.03	.22	.12	.02				.04	1.00							.32	.71	4.53
Vineland	Maurice																																
Phila., Pa***	Delaware	.56	1.52	T.	.10											.17	.05	T.					.49		T.						.56	.14	3.59
The Sea Coast.																																	
sbury Park	Coast	1.03	1.10	T.	T.											.05	T.						1.08								.44	.05	3.75
tlantic City***	...do	.84	1.25		.03										.01	.07	.23						.89								.53	.45	4.30
Cape May City	...do	1.10	.69	T.	.19		T.		T						.07		T.	T.					.25								.09	.23	2.62
Long Branch	...do.	.60	2.89													.71	.07	T.					1.20		T.						.18	.27	5.92
andy Hook***	...do	.46	1.47	T.	T.									T.		.59	.15	T.					1.51		T.						.42	.12	4.72

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitatiou for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure: Monthly mean	Pressure: Highest	Pressure: Date	Pressure: Lowest	Pressure: Late	Wind: Hourly velocity	Wind: Highest: Miles per hour	Wind: Highest: Direction	Wind: Highest: Date	Moisture: Relative humidity per cent at 8 a m	Moisture: Relative humidity, per cent at 12 noon	Moisture: Relative humidity, per cent at 8 p m	Sunshine: Percentage of possible sunshine
tlantic City	30.06	30.69	10	29.43	2	16.6	60	e.	2	73	61	68	63
ong Branch		30.70	10	29.40	3					75	63	66	
Moorestown										87	57	82	
ew York, N. Y	30.05	30.72	10	29.39	3	16.1	60	nw.	17	72	55	62	64
hiladelphia, Pa	30.07	30.74	10	29.38	2	13.2	46	s.	2	76	55	63	61
idgefield	30.05	30.73	10	29.40	3								
andy Hook	30.04	30.72	10	29.40	3	15.3	48	ne.	2	73	61	70	59
renton	30.05	30.74	10	29.39	2	10.1	35	nw.	17	76	58	68	61
erona													

Daily Temperatures for October, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	58	67	64	60	65	74	72	62	62	61	66	69	72	65	69	68	61	54	71	76	76	68	68	60	56	60	71	65	47	45	54	64.1
	Minimum	50	47	49	38	33	34	50	39	29	28	26	35	50	39	47	43	38	32	29	34	42	46	53	37	37	37	40	38	33	37	44	39.2
Charlotteburg	Maximum	58	62	67	65	62	70	73	64	54	55	65	62	70	67	63	68	59	48	70	70	71	66	65	62	58	59	68	68	48	45	52	62.4
	Minimum	48	48	44	43	34	27	51	42	24	22	17	28	46	34	42	45	33	29	30	31	35	57	48	32	30	40	47	37	30	26	39	36.7
Dover	Maximum	63	68	68	58	58	67	71	62	56	53	60	63	69	63	62	63	50	51	67	72	71	66	62	57	51	59	70	62	47	43	53	60.8
	Minimum	47	48	46	36	34	31	50	36	27	26	23	31	48	38	48	46	33	30	27	35	39	59	41	34	37	39	39	33	32	35	43	37.8
Layton	Maximum	60	55	62	54	62	70	71	55	55	59	63	66	71	64	64	70	61	50	71	74	73	67	68	60	53	61	71	62	48	48	53	62.0
	Minimum	48	47	48	36	29	29	46	35	25	23	20	28	48	35	44	35	35	30	23	29	34	57	53	36	37	39	40	34	30	29	40	36.2
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	58	65	63	56	62	70	71	57	57	56	60	66	71	69	62	69	62	50	69	75	73	68	68	58	51	60	70	67	46	41	50	61.9
	Minimum	47	45	46	37	35	35	50	43	32	28	27	37	51	40	47	43	34	29	29	48	46	48	50	38	35	37	42	37	30	34	39	39.3
Phillipsburg	Maximum	57	71	63	57	60	71	73	58	58	56	61	65	71	64	64	66	63	53	67	72	73	68	65	57	54	62	71	54	47	46	55	62.0
	Minimum	53	49	46	41	36	35	50	35	33	30	30	39	46	42	48	46	39	34	32	36	41	62	46	39	40	40	36	38	36	40	45	40.8
Sussex	Maximum	60	57	61	59	63	71	71	58	57	60	62	67	72	65	63	69	61	51	72	76	75	....	....	61	55	62	71	66	48	45	51	62.4^b
	Minimum	48	46	48	37	29	28	46	36	25	23	19	30	48	34	40	40	37	28	25	32	37	....	....	33	38	37	40	30	30	29	40	34.9^b
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	58	70	53	51	61	68	72	58	57	58	63	65	70	67	61	66	51	51	68	72	75	70	66	59	54	61	71	55	51	50	55	61.5
	Minimum	50	48	48	39	29	29	37	39	28	24	21	27	51	37	48	46	45	32	27	33	38	44	45	31	34	39	35	39	30	29	38	36.8
Elizabeth	Maximum	58	69	69	53	65	72	71	64	60	58	65	70	70	62	63	69	63	54	70	71	69	67	69	67	57	63	74	68	50	46	55	63.9
	Minimum	52	51	45	38	34	36	42	43	33	30	30	38	50	44	45	44	37	32	32	38	45	63	48	38	38	41	39	37	36	37	45	40.7
Flemington	Maximum	57	72	67	61	60	72	75	70	60	63	65	69	75	71	64	69	64	56	71	77	77	70	67	64	53	67	74	65	50	47	56	65.4
	Minimum	51	49	50	40	36	36	51	44	31	30	29	36	49	42	45	46	40	32	29	34	41	57	48	35	38	39	38	40	35	37	43	40.4
Jersey City	Maximum	62	70	61	59	60	70	74	66	55	56	62	64	71	66	60	66	55	52	67	70	70	67	67	59	54	63	72	56	51	51	61	62.5
	Minimum	51	53	50	44	42	47	54	45	40	38	42	46	55	51	47	48	37	34	40	50	56	60	54	44	40	43	49	40	38	44	50	46.2
Lambertville	Maximum	55	71	64	55	59	68	72	61	55	54	60	64	70	63	60	66	60	51	65	70	72	66	66	57	53	72	66	64	60	45	55	61.9
	Minimum	49	49	48	40	36	38	52	44	32	30	30	39	51	46	45	43	38	30	36	40	48	57	49	41	38	42	40	37	33	37	44	41.4
Little Falls§§	Maximum	58	72	55	59	67	72	76	59	59	59	66	69	74	67	64	69	52	55	71	78	74	70	68	62	55	64	75	57	49	51	57	64.0
	Minimum	51	49	50	41	34	32	56	45	29	27	26	34	49	40	38	43	42	33	29	36	40	59	49	36	39	40	45	41	34	31	40	39.9
New Brunswick	Maximum	59	74	70	59	62	69	75	69	59	57	63	68	74	70	64	67	64	52	70	77	75	67	68	63	55	66	75	71	52	47	56	65.1
	Minimum	51	50	49	41	35	37	52	43	32	31	28	39	52	44	46	47	39	32	32	40	44	57	50	41	39	43	42	41	36	39	45	41.8
Paterson	Maximum	59	70	68	59	62	70	74	64	58	57	62	67	72	65	62	68	63	52	72	74	73	68	68	61	56	61	73	63	50	45	54	63.5
	Minimum	52	50	51	42	39	40	55	49	35	33	33	41	52	48	43	46	40	34	35	40	46	61	51	38	40	41	41	43	37	37	37	42.9
Plainfield	Maximum	59	71	65	58	61	71	77	60	57	55	63	66	73	67	63	65	53	52	69	75	75	67	68	60	55	63	73	58	51	51	62	63.3
	Minimum	51	52	51	38	34	34	49	41	28	28	27	35	49	41	43	45	43	31	29	35	41	59	45	40	35	41	36	41	35	34	46	39.9
Ridgefield	Maximum	56	71	60	57	62	71	75	61	57	57	63	67	74	65	62	68	53	53	69	74	72	68	66	61	55	62	74	55	50	46	53	62.5
	Minimum	50	51	45	38	37	37	54	38	33	29	27	39	50	44	42	46	33	31	34	42	44	61	53	41	39	40	44	36	33	33	46	41.0
Somerville	Maximum	59	72	66	59	61	71	75	64	59	59	64	68	74	69	66	69	64	53	70	75	74	75	68	61	55	65	74	71	58	48	55	65.2
	Minimum	52	52	50	36	32	33	49	41	28	27	26	33	42	42	45	45	39	32	28	34	40	42	45	36	36	41	30	35	35	39	44	38.5
South Orange	Maximum	57	69	69	59	62	70	74	62	59	57	63	68	74	65	64	69	63	53	69	75	72	67	68	63	55	62	75	65	48	45	54	63.7
	Minimum	50	49	49	35	35	34	51	43	30	27	27	35	50	43	41	46	39	29	28	36	42	61	46	38	37	40	39	40	35	34	43	39.7
Verona	Maximum	55	69	59	65	58	67	71	58	54	53	58	56	70	62	59	65	61	49	66	71	70	67	64	59	52	59	71	52	46	43	53	60.1
	Minimum	50	48	49	40	37	42	55	43	31	29	29	43	53	46	42	45	34	32	34	46	50	59	51	43	38	40	48	40	34	35	43	42.2
New York, N. Y	Maximum	61	69	61	58	59	68	73	60	55	55	61	63	70	65	60	64	55	51	66	69	70	66	67	59	54	62	71	55	50	50	61	61.5
	Minimum	52	53	50	44	42	47	55	44	40	38	43	46	56	52	47	49	37	34	41	51	57	61	54	44	41	43	49	41	38	44	50	46.5
The Southern Interior.																																	
Belleplain	Maximum	60	75	64	56	62	74	78	69	59	59	66	69	75	70	65	70	65	55	69	78	75	68	68	66	58	69	75	63	51	50	67	66.1
	Minimum	51	55	48	43	54	40	48	39	24	30	21	30	53	45	39	43	41	27	25	37	49	63	48	37	37	40	35	35	38	40	46	40.7
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	57	75	70	57	61	70	77	70	58	57	63	65	75	73	65	69	64	54	67	78	78	70	68	63	54	66	74	70	56	46	58	65.4
	Minimum	46	50	50	44	38	42	52	45	34	33	27	41	52	48	45	47	46	36	38	42	46	61	49	41	41	42	44	43	38	40	46	43.5
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	58	74	67	58	62	72	76	64	58	56	64	70	73	70	64	68	64	52	70	79	74	70	68	62	56	67	74	69	50	47	59	65.0
	Minimum	49	52	48	40	34	34	54	38	28	27	25	34	52	40	36	44	38	30	28	35	40	58	50	40	37	41	43	36	34	37	45	39.6
Indian Mills	Maximum	57	73	67	56	62	74	78	67	56	58	67	72	76	70	63	69	64	51	72	80	75	70	69	65	59	69	76	69	52	48	61	66.0
	Minimum	51	54	49	36	34	36	53	41	28	32	24	35	50	46	39	44	40	26	28	35	46	61	47	36	35	39	36	36	38	38	46	40.0
Lakewood	Maximum	58	71	65	56	59	70	75	66	56	52	58	64	72	63	61	66	62	51	67	76	71	66	66	64	55	64	74	64	48	48	60	62.8
	Minimum	51	54	53	38	35	35	52	41	29	30	26	35	49	45	40	46	40	30	28	39	43	60	47	41	38	41	46	41	39	42	47	41.3
Moorestown	Maximum	55	74	59	58	63	70	78	61	58	56	64	68	74	68	63	68	55	54	70	78	75	70	65	62	55	67	74	56	45	46	58	63.5
	Minimum	51	54	47	43	37	40	53	39	35	32	30	40	50	47	46	45	35	32	32	38	37	55	43	41	39	43	43	39	37	41	47	41.6
Pleasantville§§	Maximum	67	73	61	56	62	70	79	63	63	63	60	68	77	66	66	68	69	53	66	71	72	66	66	65	55	69	74	58	51	59	65	65.2
	Minimum	52	53	48	37	33	33	53	41	27	27	25	32	51	46	40	41	42	26	26	27	65	60	51	43	38	38	40	37	38	38	46	40.5
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	54	73	58	56	60	68	74	58	57	55	63	67	71	66	62	68	55	53	68	75	73	69	67	59	54	66	72	55	49	48	57	62.3
	Minimum	51	51	50	44	40	43	53	43	38	34	38	45	54	50	48	48	37	34	38	45	49	57	50	42	41	44	45	39	36	39	46	44.1
Tuckerton	Maximum	66	71	70	60	65	72	80	73	62	55	65	66	78	74	65	70	67	68	68	72	71	66	67	68	58	67	76	67	59	50	63	67.1
	Minimum	50	63	45	37	34	40	54	41	29	29	31	36	53	48	40	45	40	45	30	38	50	58	50	43	37	38	40	38	38	35	45	41.9
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa	Maximum	57	75	60	58	62	70	77	61	59	57	63	66	74	67	63	68	56	55	68	76	76	70	66	61	54	67	74	57	49	50	60	63.7
	Minimum	52	53	50	45	46	50	58	49	43	40	42	49	58	55	51	50	42	37	47	49	56	58	50	45	42	45	48	43	40	44	50	48.0
The Sea Coast.																																	
Asbury Park	Maximum	68	68	62	58	59	66	77	62	59	51	61	64	71	62	59	66	63	54	68	67	69	65	64	62	58	66	76	62	56	53	59	63.1
	Minimum	53	55	47	43	39	44	56	45	36	41	36	46	57	51	46	49	38	34	38	49	54	59	53	46	39	43	48	44	41	41	51	45.9
Atlantic City	Maximum	60	71	63	56	61	69	78	64	59	52	59	64	73	62	61	67	59	53	62	66	67	65	62	66	55	68	68	57	50	54	62	62.4
	Minimum	56	59	50	47	44	54	58	47	42	38	39	46	59	52	48	49	37	35	40	59	59	60	57	46	43	47	53	46	47	49	54	49.0
Cape May City	Maximum	60	73	62	56	62	70	77	62	57	56	60	65	73	67	62	69	60	54	64	68	69	66	66	64	56	68	68	58	52	57	66	63.5
	Minimum	54	58	52	48	42	57	60	41	38	37	37	42	59	51	46	51	42	40	39	56	57	58	54	47	46	48	50	44	43	51	57	48.5
Long Branch	Maximum	56	67	60	56	60	66	72	60	58	50	55	60	68	59	56	63	53	50	66	68	66	61	63	59	54	63	71	54	46	49	54	59.5
	Minimum	54	56	46	41	38	40	52	46	35	35	31	40	50	46	47	46	38	31	34	42	45	57	48	43	37	42	44	41	39	44	49	43.1
Sandy Hook	Maximum	57	69	63	56	59	69	72	60	57	51	56	62	70	62	59	64	56	51	65	69	67	64	64	60	53	63	70	54	46	50	55	60.4
	Minimum	53	55	52	48	45	49	57	47	44	41	43	48	56	54	50	50	39	37	43	48	53	59	53	45	43	46	50	42	39	45	50	47.9

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	*	.142	.064	.144	.080	.064	.160	.192	.128	.080	.096	.096	.144	096	.106	.162	.064	.128	.080	.096	.080	.114	.160	.112	.128	.160	.160	*	*	*	.084	3.120
	Wind movement	.160	133	63	28	28	45	44	50	62	28	17	78	54	39	72	88	88	52	80	77	86	111	112	77	75	79	78	57	76	41	33	2111
Runyon	Evaporation	.010	.010	.100	.110	.090	.100	.082	.110	.110	.085	.080	.080	.085	.110	.100	.030	.090	.100	.110	.110	.100	.020	.060	.105	.105	.110	.115	.105	.100	.030	0	2.552
	Wind movement	11	60	73	67	71	71	51	42	17	23	24	23	22	17	19	17	50	52	49	54	54	140	52	54	47	53	52	53	53	58	36	1468

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

WILLIAM T. LATHROP, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. NOVEMBER, 1929. No. 11

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month averaged slightly more than a degree and a half above normal and, for the most part, was a pleasant one. The extremes of temperature are notable, in that records were established, or approached closely. The highest temperature, 83° on the 2d. establishes a new record for the State, the previous highest for November being 80°, which occurred in four years. Temperatures of from 75° to 83° occurred at numerous stations on the 1st and prevailed generally on the 2d. A lower temperature than that of this month has been recorded in only three years since 1885, and the record is only 3° lower than the lowest this month. Temperatures were rather high from the 12th to the 15th, inclusive, also, and were considerably below normal from the 21st to the 23d, inclusive, and on the 29th.

The total precipitation averaged about one-third of an inch below normal, however there were more than the normal number of rainy days and the percentage of sunshine averaged less than half the possible amount. All stations had more than two inches of precipitation but only one station had more than three and a half inches. Only a few stations reported a total snowfall of one inch or more, they being in the extreme northern portion of the State and along the southeast coast.

No damaging wind or hail storms were reported. R. C. C. Jr.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 34 stations, was 44.5°, which was 1.6° above normal. The highest temperature was 83° at Indian Mills on the 2d, and the lowest, 4°, at Newton on the 30th. The greatest daily range of temperature was 39° at Belleplain on the 7th. The highest monthly mean temperature was 48.2° at Cape May City, and the lowest, 40.2° at Layton.

The temperature departure from the normal for the year, 1929, to date, by sections, is: The Highlands, +1.1°; Red Sandstone Plain, +0.8°; Southern Interior, +1.1°; Sea Coast, +1.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 41 stations, was 2.73 inches, which was 0.32 inch below normal. The average total snowfall at nineteen selected stations was 0.4 inch. The greatest monthly precipitation was 3.64 inches, at Tuckerton, and the least, 2.08 inches at Sandy Hook. The greatest amount of precipitation in any 24 consecutive hours was 1.92 inches at Layton on the 18th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or 2 more than normal.

The precipitation accumulated departure from the normal for the year 1929, to date, by sections, is: The Highlands. —0.91 inch; Red Sandstone Plain, —2.32 inches; Southern Interior, —1.27 inches; Sea Coast, —5.64 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 42 miles per hour from the southwest at Sandy Hook on the 28th. High winds occurred almost generally on the 28th, 29th and 30th.

MISCELLANEOUS.

The per cent of possible sunshine was 45, or 13 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.07 inches, 0.03 inch below normal. The highest reading observed was 30.53 inches on the 22d at Sandy Hook, and the lowest was 29.22 inches on the 28th also at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 3.1 feet, and the highest was 7.8 feet on the 20th. The mean stage at Trenton was 2.0 feet, or 0.2 foot above normal. The highest stage was 5.0 feet on the 20th.

Dense fog occurred on the following dates: 1, 3, 4, 8, 11, 12, 13, 14, 18 and 27. Sleet was recorded at Dover, Elizabeth, Flemington, Ridgefield and Somerville on the 24th, and at Dover also on the 27th. A few stations, along sections of the coast, that did not have killing frosts or freezing temperatures last month reported them on the 22d.

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	44.8	76	18	4.53	7.90	2.72					
1886	44.5	73	17	4.49	6.24	3.45	......	......	......	......	......
1887	41.5	72	13	1.94	2.60	0.95	......	......	......	......	......
1888	45.8	77	8	3.97	5.41	2.66	......	......	......	......	6
1889	45.7	69	13	**8.48**	**11.45**	4.70	......	......	......	13	10
1890	43.8	74	11	0.82	*1.10*	0.38	......	......	......	13	13
1891	42.2	70	6	2.39	3.47	1.54	......	13	12	5	8
1892	41.9	71	12	7.29	9.49	**4.74**	......	12	10	8	4
1893	41.8	70	11	3.48	4.53	2.19	......	8	9	13	11
1894	40.3	76	11	3.34	5.12	1.77		10	11	9	7
1895	45.7	80	12	3.17	5.10	1.56	0	13	7	10	10
1896	48.2	78	12	3.05	5.68	1.37	3.2	12	7	11	10
1897	43.8	74	10	4.59	5.95	2.42	1.3	9	9	12	8
1898	42.4	70	11	6.76	9.07	3.83	**14.7**	8	11	11	12
1899	44.0	71	17	2.29	4.32	0.72	1.1	10	9	11	14
1900	47.5	79	15	3.43	5.54	1.82	T.	15	8	7	7
1901	*38.5*	69	10	2.38	4.23	1.18	0.8	9	10	11	9
1902	**49.3**	80	20	2.20	4.17	0.87	0.2	12	9	9	6
1903	39.9	79	3	1.26	2.03	0.75	T.	10	11	9	8
1904	40.2	69	6	2.18	3.40	1.30	1.6	16	8	6	6
1905	42.1	70	6	1.84	2.86	0.54	0.1	12	10	8	6
1906	43.6	70	8	1.61	2.52	1.06	2.3	12	10	8	6
1907	43.5	*68*	13	5.65	6.95	4.19	0.8	16	7	7	6
1908	43.1	72	2	0.96	1.29	0.35	2.2	10	8	12	13
1909	46.4	80	12	2.36	4.33	1.32	2.1	14	8	8	4
1910	40.4	71	13	3.79	5.73	1.63	1.4	13	8	9	8
1911	41.3	73	13	5.17	6.50	3.17	1.7	5	13	12	9
1912	45.3	76	11	3.43	8.12	2.02	1.3	8	11	11	10
1913	46.2	77	**21**	2.71	4.89	1.00	T.	15	8	7	6
1914	43.3	80	6	2.60	4.81	1.21	0.7	14	7	9	7
1915	44.0	75	17	1.69	3.11	0.96	0	16	8	6	6
1916	43.3	75	12	2.11	3.81	0.80	T.	14	8	8	8
1917	39.8	*68*	9	*0.56*	1.15	*0.18*	0.7	16	5	9	8
1918	43.9	71	12	1.87	3.05	0.49	0	19	5	6	3
1919	43.7	76	13	3.74	6.18	1.98	T.	14	6	10	7
1920	43.0	74	12	4.41	7.90	2.14	0.2	13	7	10	11
1921	44.3	79	18	4.26	6.69	2.79	0.1	9	6	15	10
1922	44.3	73	13	0.91	1.56	0.49	0.2	9	6	15	14
1923	43.1	72	11	2.51	4.09	1.10	0	13	8	9	6
1924	42.9	77	*1*	2.03	3.23	1.17	1.3	11	8	11	7
1925	42.0	76	10	3.40	5.10	2.48	0.7	14	8	8	5
1926	42.5	76	8	4.04	7.19	2.44	T.	14	8	8	9
1927	47.9	78	15	4.02	8.68	1.74	0.1	13	8	9	9
1928	45.1	78	13	1.90	2.76	1.20	0.3	10	8	12	11
1929	44.5	**83**	4	2 73	3.64	2.08	0.4	10	9	11	9

W. B. O. Philadelphia 12-26-29 830.

Climatological Data for November, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	42.8	+1.7	77	2	9	30	30	3.08	−0.16	1.30	0.5	8	13	8	9	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	41.2	+1.1	68	2†	6	30	34	2.91	−0.61	1.28	1.5	9	2	8	20	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	.....	.....	5	30	....	2.55	−0.25	1.52	0.7	13	10	4	16	w.	Brice E. Riker.
Dover	Morris	600	45	41.4	+1.3	75	2	8	30	31	2.60	−1.04	1.23	1.0	12	1	15	14	......	William C. Harris
Layton	Sussex	480	28	40.2	+1.4	76	2	7	30	35	3.12	+0.63	1.92	0.7	10	4	5	21	w.	A. M. Depue.
Long Valley	Morris	......	....	......	......	.....	.....	.....	.....	....	......	....	.....	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	45	41.6	+1.1	76	2	4	30	33	2.53	−0.58	1.11	0.5	11	4	4	22	nw.	Irving J. Kern.
Phillipsburg	Warren	363	46	43.0	+1.8	76	2	11	30	24	2.96	−0.24	1.09	0.5	7	11	10	9	......	Town Engineer.
Sussex	Sussex	442	34	41.3	+0.2	75	2	8	30	34	3.09	−0.16	1.37	......	10	12	7	11	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	41.6	+1.2	77	2	4	30	35	2.86	−0.30	1.92	0.8	10	7	8	15	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	31	47.0	+3.3	74	1†	14	30	26	2.21	−1.06	0.80	T.	9	15	6	9	w.	William Mann.
Boonton	Morris	400	§39	41.3	−0.1	75	2	9	30	35	2.41	−1.16	1.07	......	11	13	1	16	sw.	John Kline.
Chatham	Morris	185	25	......	......	.....	.....	.....	.....	....	3.20	+0.30	1 20	T.	13	14	3	13	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	45.0^{b}	+1.5	77^{a}	2	11^{b}	30	29^{b}	2.44	−0.81	0.89	T	11	14	5	11	w.	Union County Park Com.
Flemington	Hunterdon	140	§43	44.6	+1.7	79	2	10	30	32	3.21	+0.09	1.42	T.	10	14	6	10	w.	Hiram E. Deats.
Jersey City	Hudson	10	31	46.0	+2.0	74	2	11	30	20	2.14	−1.05	0.75	T.	10	9	7	14	w.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	43.0	−0.2	74	2	9	30	21	2.64	−0.57	0.84	T.	9	15	4	11	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	43.5	+1.3	79	2	11	30	34	2.93	+0.03	1.15	......	12	12	5	13	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	45.0	+1.6	76	1†	11	30	29	2.21	−1.27	0.81	T.	8	12	8	10	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	.....	.....	.....	.....	....	2.32	....	0.97	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	68	45.3^{a}	+1.8	78	2	15^{a}	30	26^{a}	2.72	−0.45	0.95	0	11	11	4	15	sw.	Marion T. Probert.
Plainfield	Union	120	41	44.0	+1.5	76	2	10	30	29	2.82	−0.55	1.00	0.1	11	10	9	11	nw.	E. D. Pearson.
Ridgefield	Bergen	80	12	43.7	......	77	2	10	30	37	2.28	....	0.88	T.	10	9	8	13	nw.	George P. Kirsten.
Somerville	Somerset	70	46	44.5^{e}	+2.1	79^{e}	2	12^{a}	30	31^{e}	2.59	−0.45	1.26	0	8	....	....	....	......	Arthur Gerlich.
South Orange	Essex	200	57	43.8	+2.0	79	2	10	30	30	2.82	−0.48	1.15	T.	10	4	7	19	w.	Everett W. Bird.
Verona	Essex	490	3	......	......	.....	.....	.....	.....	....	......	....	.....	......	....	....	....	....	......	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	.....	.....	.....	.....	....	2.28	....	0.62	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	59	46.0	+1.8	73	2	11	30	21	2.08	−0.88	0.79	T.	11	3	11	16	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	44.4	+1.5	79	2	9	30	37	2.58	−0.57	1.42	T.	10	12	5	13	w.	
The Southern Interior.																				
Belleplain	Cape May	30	35	45.4	+0.9	82	2	10	30	39	2.29	−0.32	1.00	0.7	12	10	5	15	sw.	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	.....	.....	.....	.....	....	......	....	.....	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	46.6	+2 2	78	2	13	30	27	3 29	+0.18	1.19	T.	11	11	4	15	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	.....	.....	.....	.....	....	......	....	.....	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	45.2	+1.9	79	2	11	30	32	2.35	−0.96	0.83	T.	6	14	5	11	sw.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	45.4	+2.5	83	2	9	30	33	2.99	−0.09	0.91	T.	9	6	13	11	sw.	James M. Armstrong.
Lakewood	Ocean	54	25	45.1	+2.3	80	2	13	30	28	3.48	+1.02	1.15	T.	11	9	5	16	nw.	R. W. Holman.
Moorestown	Burlington	......	66	44.6	+1.4	80	2	11	30	25	3.21	−0.04	0.98	T.	15	9	7	14	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	......	......	.....	.....	.....	.....	....	2.83	+0.45	0.97	1.4	12	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	46.2	......	80	2	10	30	36	3.09	+0.37	0.99	......	11	13	4	13	w.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	......	......	.....	.....	.....	.....	....	2.65	....	0.94	......	8	16	7	7	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	45.3	+0.9	76	2	12	30	22	2.24	−0.49	0.78	T.	11	7	8	15	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	.....	.....	.....	.....	....	2.35	....	0.64	T.	13	....	....	....	.....	Edward H. Ristow.
[illegible]	Ocean	23	36	46.6	+2.5	79	2	10	30	32	3.64	+0.56	1.06	1.0	11	14	1	15	ne.	John H. Brown.
[illegible]	Cumberland	109	59	......	......	.....	.....	.....	.....	....	......	....	.....	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa	......	117	58	47.4	+1.7	77	2	14	30	20	3.11	+0.41	1.61	T.	10	6	9	15	sw.	U. S. Weather Bureau.
Means and extremes	......	......	.	45.6	+1.8	83	2	9	30	39	2.87	+0.07	1.19	0.3	11	11	6	13	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	46.4	+1.6	79	2	13	30	23	2.09	−0 83	1.08	T.	7	16	4	10	nw.	Information Bureau.
Atlantic City	Atlantic	16	56	47.4	+1.8	69	15	14	30	21	3.19	+0.37	1.24	0.4	13	7	10	13	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	48.2	+0.8	76	2	16	30	24	2.48	−0.74	0.88	2.1	11	4	12	14	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	47.0	+2.8	81	2	13	30	25	3.46	−0.06	1.22	T.	11	5	12	13	nw.	William D. Martin.
Sandy Hook	Monmouth	22	31	45.8	+1.2	72	2	14	30	18	2.08	−1.17	0.77	T.	11	7	9	14	sw.	U. S. Weather Bureau
Means and extremes	......	......	....	47.0	+1.6	81	2	13	30	25	2.66	−0.49	1.24	0.5	11	8	9	13	nw.	
For the State	......	......	....	44.5	+1.6	83	2	4	30	39	2.73	−0.32	1.92	0.4	10	10	7	13	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for November, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		T.	.75	.06							T.		.13	T.	.30		.29	1.30			.05						T.	.20				3.08
Charlotteburg	Passaic	.04		.69	.09							.02				.40		.17	1.28						.12				.10				2.91
Culvers Lake	Delaware	.02	.05	.50	.08					.03				.01	.05	.15		.08	1.52						.02			.01	.03		T.		2.55
Dover	Passaic	.02		.78										.10	.04	.16		*	1.23		.01				.12				.14				2.60
Layton	Delaware	.03		.55	.02									.13	.06	.15		.14	1.92						T.			.02	.10	T.			3.12
Long Valley																																	......
Newton	Delaware	.02	.08	.89	.03									.03	.08	.10			1.11						.10			.04	.05				2.53
Phillipsburg	...do		T.	1.09								T.		.07	.06	.09		.55	1.06		T.	T.		T.	.04			T.	T.				2.96
Sussex	Hudson	.06		.52	.66	.01								.03	.07	.16		.09	1.37						.12								3.09
The Red Sandstone Plain.																																	
Bayonne	Coast			.80	.15									.10	.10			.20	.70		.04				.04				.08				2.21
Boonton ‖	Passaic	.06		.44	.29	T.						T.			.09	.06	.05	.02	1.07	.22					T.	.04			.07	T.			2.41
Chatham ‖	...do	.09		.11	1.20	T.									.14	.17	.21	.19	.57	.26		.06			.03	.08		T.	.09				3.20
Elizabeth	Coast	.03		.89	.14				T.	T.				.06	.06	.18		.18	.78			.03			.04				.05				2.44
Flemington	Raritan	T.	T.	1.42	.07									.08	.03	.15		.18	1.10			.04		T.	.10			T.	.04				3.21
Jersey City	Coast		T.	.75	.13				T.			T.		.08	.03	.12		.16	.75		T.	.02		T.	.08				.02				2.14
Lambertville	Delaware	.03		.84	.22				T.					.27	.08	.12		.16	.83				T.	T.	.09								2.64
Little Falls ‖	Passaic	.08		1.15	.06										.14	.07	.09	.18	.73	.24		.01				.07			.11				2.93
New Brunswick	Raritan	T.	T.	.81	.13				T.				T.	.10	.05	.17		.12	.76					T.	07	T.		T	T.				2.21
New Milford.**	Hackensack		.06	.97										.11		.16		.33	.64						.02				.03				2.32
Paterson	Passaic		T.	.95	.17									.12	.10	.12		.50	.59			.03			.06			.02	.06				2.72
Plainfield	Raritan		.02	1.00	.08				T.					.17	.02	.24		.17	.92		T	.05		T.	.10				.05				2.82
Ridgefield**	Hackensack		.02	.88	.03				T.					.14		.20		.14	.78			.03		T.	.03			T.	.03				2.28
Somerville	Raritan	T.		1.26	.02										.04	.20		.21	.73			.05			.08								2.59
South Orange	Rahway			1.15	.08									.09	.12	.25		.19	.70			.05			.10	T.			.09				2.82
Verona**	Passaic																																......
Woodcliff Lake**	Hackensack		.15	.37	.35									.15		.13		.62	.31			.07			.09				.04				2.28
New York, N. Y***	Coast		.04	.76	.04				T.			T.		.09	.02	.10		.37	.54		T.	.02		T.	.08			T.	.02				2.08
The Southern Interior.																																	
Belleplain	Tuckahoe			.11	1.00				.15	.02				.02	.18	.04		.20	.12					.10	.10				T.	.25			2.29
Bridgeton	Coast																																......
Burlington	Delaware		.04	1.19	.12				.01					T.	.13	.20		.32	1.18			.03		T.	.05			.02					3.29
Clayton	Delaware																																......
Hightstown	Raritan		T.	.83	.27				.07						.14		T		.32	.72			T.		T.								2.35
Indian Mills	Mullica			.91	.78				.15						.18	.17		.08	.58			.03		T.	.11				T.	T.			2.99
Lakewood	Metedeconk		T.	1.15	.86				.14			T.		.12	.10	.13		.06	.80			.02		.02	.08				T.	T.			3.48
Moorestown ‖	Delaware	.25		.98	.67	.03				.02				.03	.12	.19	.03	T.	.63	.16		.02		T.	.04	.02		.02	T.				3.21
Northfield	Coast			.16	.95				.13					.06	.03	.05		.09	.97					.28	.05					.02	.04		2.83
Pleasantville ‖	Coast	.17			.76	.44			.12	.06					.06	.05			.99	T.				.12	.22	.06			T.	.04			3.09
Runyon	Coast			.94	.17				.04					.25		.22		.40	.48						.15								2.65
Trenton***	Delaware		.25	.66	.08				T			T.		.10	.04	.15		.43	.46		T.	.01	T.	T.	.05			T.	.01				2.24
Trenton No. 2 ‖	Delaware	.05		.36	.52	.03			T.	T.					.12	.14	.05	.09	.64	.25		.02			T.	.05			.03				2.35
Tuckerton	Coast			.70	.85	.05			.15	.08				.05	.30	.05			1.06					.32	.03					T.			3.64
Vineland	Maurice																																......
Phila., Pa***	Delaware		1.10	.58	.11				T.			T.		.06	.02	.16		.53	.52		.02	T.	T.	T.	.01			T.					3.11
The Sea Coast.																																	
Asbury Park	Coast		.02	1.08	.47				.12	T.				.02	T.	T.		.36				T.	T.	T.	.02			T.	T.				2.09
Atlantic City***	...do			.40	.91				.15	.01				.03	T.	.05		.94	.30				T.	.27	.07			.01	.01	.04			3.19
Cape May City	...do			.22	.88				.11	.01			T.	T.	.02	T.		.07	.72				T	.34	.03				.04	.04			2.48
Long Branch	...do		.30	.36	.26				.40				T.	.26	.04			.40	1.22					.01	.20				.01				3.46
Sandy Hook***	...do		.14	.68	.22				.09			T.		.06	.05	.13		.26	.38			.03	T.	T.	.04			T.	T.				2.08

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-tation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following neasurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Highest: Miles per hour	Highest: Direction	Highest: Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.08	30.52	22	29.27	28	14.7	37	w.	28	80	.....	74	44
ong Branch	30.07	30.51	22	29.26	28	.....	.....	.....	.....	74	66	68	.....
oorestown	.....	.....	.....	.....	.....	.....	.....	.....	.....	83	64	74	.....
ew York, N. Y	30.06	30.50	22	29.24	28	14.0	48	nw.	28	74	65	64	43
hiladelphia, Pa	30.09	30.58	22	29.24	28	11.5	36	w.	28	75	63	70	42
idgefield	30.06	30.47	22	29.24	28	.....	.....	.....	.....	.....	.....	.....	.....
andy Hook	30 06	30.53	22	29.22	28	14.3	42	sw.	28	79	67	70	44
renton	30.07	30.51	22	29.23	28	9.2	37	w.	28	78	61	69	47
erona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Daily Temperatures for November, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	71	77	70	60	54	54	57	54	54	57	54	54	53	58	63	55	47	47	52	49	42	38	35	35	40	48	46	45	32	22	....	50.8
	Minimum	51	62	47	45	37	27	30	40	38	27	37	44	42	52	53	33	35	42	33	32	29	23	19	28	28	24	28	29	17	9	....	34.7
Charlotteburg	Maximum	67	68	65	54	53	53	53	52	47	58	57	56	68	65	64	64	50	47	51	46	43	37	30	34	39	45	48	47	31	17	....	50.4
	Minimum	50	60	45	43	37	20	23	34	33	24	38	28	45	42	53	32	30	40	36	32	31	20	16	17	30	21	30	30	16	6	....	32.1
Dover	Maximum	68	75	65	55	51	54	56	50	50	56	51	62	55	58	64	51	47	48	53	48	42	35	34	35	40	47	49	41	33	25	....	60.0
	Minimum	48	62	47	42	39	24	29	33	35	27	29	31	37	52	43	34	35	41	37	33	28	22	19	28	27	25	32	24	12	8	....	32.8
Layton	Maximum	67	76	63	58	50	56	54	54	49	58	54	63	52	59	64	55	45	50	51	45	42	32	33	34	40	45	46	42	25	25	....	49.6
	Minimum	50	58	45	43	31	22	24	35	34	23	32	32	39	50	47	31	33	39	33	29	25	20	12	26	26	16	26	25	14	7	....	30.9
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	68	76	69	57	52	63	53	52	49	56	52	64	54	58	63	53	46	49	51	48	42	35	33	34	40	45	45	45	28	19	....	50.0
	Minimum	48	60	43	42	35	30	34	38	35	28	38	35	41	51	45	33	36	40	35	31	30	21	16	25	28	23	31	25	15	4	....	33.2
Phillipsburg	Maximum	72	76	68	59	52	54	54	52	48	53	55	59	55	59	65	51	45	51	53	46	41	37	35	36	40	50	52	42	27	21	....	50.3
	Minimum	54	67	49	43	37	30	32	42	34	29	39	37	45	64	45	38	36	42	35	35	30	26	23	30	31	27	29	26	17	11	....	35.8
Sussex	Maximum	68	75	68	57	53	54	54	53	50	58	53	65	54	61	63	55	47	58	50	47	41	37	33	33	40	43	45	44	31	22	....	50.4
	Minimum	50	55	45	40	39	22	25	38	36	26	32	31	37	50	52	31	34	41	35	31	28	20	17	27	29	22	25	30	11	8	....	32.2
The Red Sandstone Plain.																																	
Bayonne	Maximum	74	74	70	60	53	58	66	56	50	55	57	63	60	63	67	60	53	52	50	47	41	39	38	40	44	54	55	47	31	26	....	53.1
	Minimum	55	56	44	45	40	46	43	45	42	44	46	50	50	51	55	40	40	42	40	38	35	29	27	28	32	46	38	40	22	14	....	40.8
Boonton§§	Maximum	71	75	56	55	52	56	55	48	50	59	54	64	53	64	66	53	46	50	53	48	43	37	34	37	55	50	50	39	27	23	....	50.8
	Minimum	48	52	51	43	39	23	27	31	38	25	29	29	31	43	50	35	32	41	31	28	33	24	18	21	28	21	24	30	19	9	....	31.8
Elizabeth	Maximum	71	77	70	54	54	58	61	....	50	60	57	65	60	64	68	56	54	57	56	51	45	39	37	37	43	38	52	52	32	21	....	53.1[a]
	Minimum	64	60	50	48	37	29	32	....	38	29	36	35	42	56	52	36	35	48	35	32	35	25	....	32	30	32	33	32	21	11	....	37.0[b]
Flemington	Maximum	76	79	72	58	57	58	60	54	52	59	57	65	55	61	66	56	47	56	54	50	47	39	36	35	44	54	52	52	33	28	....	53.7
	Minimum	53	60	50	42	38	27	32	43	40	28	35	33	42	52	53	35	33	43	35	33	31	25	23	30	29	25	29	33	20	10	....	35.4
Jersey City	Maximum	73	74	66	55	52	55	56	52	48	56	56	62	59	62	69	51	50	58	53	50	44	40	38	42	42	52	53	44	30	23	....	62.2
	Minimum	52	61	48	44	40	38	41	46	41	38	43	45	49	55	52	39	42	44	40	38	35	30	28	33	33	36	37	32	21	11	....	39.8
Lambertville	Maximum	72	74	63	54	53	53	54	50	47	52	56	59	56	60	65	49	47	55	51	43	40	34	32	35	38	49	50	49	30	21	....	49.7
	Minimum	53	60	48	46	35	33	34	42	39	31	38	39	45	53	49	35	41	42	35	30	32	25	24	29	30	30	31	28	19	9	....	36.2
Little Falls§§	Maximum	75	79	50	55	54	58	60	49	52	61	57	66	56	68	68	55	47	52	54	50	45	38	36	37	43	51	53	42	29	27	....	52.2
	Minimum	50	56	48	46	39	27	31	42	39	29	36	32	38	46	51	32	36	35	37	33	34	26	22	28	32	25	29	33	20	11	....	34.8
New Brunswick	Maximum	76	76	73	54	55	57	58	51	50	58	57	63	58	62	69	59	48	59	54	50	46	37	36	38	40	53	53	52	32	24	....	53.3
	Minimum	53	61	49	45	38	32	33	43	42	31	37	34	44	53	55	34	36	43	37	30	31	26	26	31	29	30	36	32	21	11	....	36.8
Paterson	Maximum	72	78	71	54	53	57	58	50	50	57	55	62	56	60	67	64	47	51	53	49	45	38	35	40	42	50	51	50	39	25	....	52.6
	Minimum	53	62	....	48	40	32	37	44	41	34	39	40	42	53	54	38	40	44	35	36	36	28	24	34	32	30	34	34	22	15	....	38.0[a]
Plainfield	Maximum	74	76	66	55	53	55	57	49	47	56	57	62	59	62	67	52	51	56	53	55	45	40	38	42	42	52	52	44	28	22	....	52.2
	Minimum	49	59	52	43	39	26	29	43	41	29	35	34	40	53	55	37	34	45	33	31	34	25	24	30	29	27	34	32	20	10	....	35.7
Ridgefield	Maximum	73	77	61	53	52	55	57	48	49	67	55	59	58	59	65	53	46	55	53	48	44	38	36	38	41	50	52	43	27	21	....	51.1
	Minimum	52	61	48	47	37	33	35	42	33	30	41	36	42	51	46	35	40	44	39	35	29	26	23	31	31	30	35	33	14	10	....	36.3
Somerville	Maximum	75	79	69	59	54	56	59	....	....	57	56	62	58	60	66	55	46	56	54	49	41	38	35	35	41	54	51	....	....	....	....	54.6[c]
	Minimum	54	62	50	42	35	25	30	30	29	27	38	33	44	48	54	35	34	35	34	33	30	23	23	31	29	27	31	....	21	12	....	34.4[a]
South Orange	Maximum	75	79	72	54	54	57	59	49	50	58	56	60	57	61	65	54	47	53	54	51	45	39	35	36	42	52	51	50	32	25	....	52.4
	Minimum	53	59	48	46	37	27	32	42	40	30	35	34	39	52	54	34	35	43	32	31	33	24	23	30	29	27	30	31	19	10	....	35.3
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	72	73	66	55	52	55	56	54	48	56	55	62	58	62	68	51	50	58	53	48	44	39	39	42	42	52	63	44	30	23	....	52.0
	Minimum	54	62	48	45	40	40	44	46	41	38	45	48	50	55	47	39	43	44	42	39	35	30	29	33	33	38	37	28	16	11	....	40.0
The Southern Interior.																																	
Belleplain	Maximum	78	82	72	63	55	59	65	53	50	59	62	60	59	66	70	58	55	63	56	50	44	37	36	47	45	54	57	52	36	29	....	55.7
	Minimum	52	59	61	49	36	25	26	45	39	21	32	31	43	51	55	35	34	46	31	25	25	18	27	32	30	29	29	33	24	10	....	35.1
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	77	78	74	58	56	56	56	53	51	56	58	62	68	67	68	60	53	62	60	52	45	40	35	40	40	54	54	51	38	27	....	55.0
	Minimum	54	57	57	49	40	30	30	45	38	29	34	36	45	65	57	40	43	40	40	35	35	29	28	29	30	30	37	38	23	13	....	38.2
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	78	79	72	56	54	66	57	50	49	59	61	64	60	62	67	58	48	60	56	53	47	36	41	39	40	56	56	50	36	26	....	54.2
	Minimum	53	67	47	46	36	32	30	41	38	27	30	33	39	55	54	35	36	43	37	30	25	27	34	32	30	31	36	30	20	11	....	36.2
Indian Mills	Maximum	79	83	76	55	53	60	60	54	49	58	62	62	58	63	70	62	52	60	55	50	45	40	35	40	41	65	63	63	30	20	....	64.8
	Minimum	54	62	53	50	37	28	28	44	42	25	35	32	45	57	57	32	35	45	34	28	29	22	30	32	29	29	31	30	18	9	....	36.1
Lakewood	Maximum	75	80	72	54	53	56	58	50	49	53	59	58	59	64	70	55	49	61	54	47	42	37	36	41	40	54	57	52	32	25	....	53.1
	Minimum	55	60	53	49	37	28	32	44	37	26	35	36	39	55	55	34	35	47	39	27	29	27	31	35	31	29	39	32	23	13	....	37.1
Moorestown	Maximum	76	80	67	53	54	56	57	50	48	55	60	60	57	62	68	56	47	60	54	47	42	35	34	37	40	53	55	41	28	23	....	51.8
	Minimum	55	62	51	42	36	32	35	44	36	30	41	36	46	57	46	38	44	45	37	33	29	27	29	33	31	32	38	28	14	11	....	37.3
Pleasantville§§	Maximum	72	80	71	59	59	59	63	53	63	58	60	58	61	66	71	60	65	63	57	57	57	57	41	50	44	64	59	59	33	23	....	67.1
	Minimum	50	56	57	48	44	25	28	28	41	25	31	35	39	54	55	32	34	45	34	28	27	21	21	33	30	29	36	38	25	10	....	35.3
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	75	76	65	56	53	57	57	49	50	56	60	62	60	63	68	54	47	59	54	47	42	39	34	37	42	53	54	41	29	23	....	52.1
	Minimum	56	61	49	45	39	38	39	44	40	35	42	40	46	56	47	40	43	43	41	37	30	28	27	32	32	34	37	29	14	12	....	38.5
Tuckerton	Maximum	74	79	68	60	55	60	63	57	50	58	60	60	58	62	70	65	53	60	58	55	48	45	40	48	43	55	58	56	45	32	....	56.6
	Minimum	55	56	52	42	35	30	33	45	38	37	35	36	40	55	55	33	40	45	37	30	29	22	22	37	30	30	37	37	22	10	....	36.8
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa	Maximum	75	77	68	59	54	67	59	52	60	55	69	61	59	64	68	56	52	59	55	47	44	37	36	40	42	62	54	45	32	24	....	53.1
	Minimum	57	63	52	46	43	41	44	47	44	41	45	47	51	59	48	44	46	46	44	40	34	32	30	35	35	37	39	32	17	14	....	41.8
The Sea Coast.																																	
Asbury Park	Maximum	63	79	68	64	65	59	67	52	50	57	56	59	58	61	71	56	62	59	56	53	47	41	40	49	42	56	53	52	36	24	....	53.8
	Minimum	66	57	51	49	38	38	40	48	39	34	43	40	46	54	48	37	43	46	40	35	33	28	31	26	32	35	38	33	22	13	....	39.1
Atlantic City	Maximum	65	65	61	58	66	58	68	54	60	54	57	56	58	64	69	57	55	62	56	48	44	36	45	50	44	52	54	46	34	22	....	53.0
	Minimum	58	60	56	44	39	44	46	48	40	35	46	43	54	56	48	40	48	50	43	38	32	29	30	36	35	43	43	34	18	14	....	41.7
Cape May City	Maximum	68	76	70	62	53	69	64	54	50	55	59	60	59	68	67	55	56	62	56	54	44	39	42	46	46	54	67	47	34	22	....	54.6
	Minimum	58	60	60	47	39	35	44	47	38	34	43	41	53	56	49	46	62	48	44	38	32	29	29	37	37	43	44	33	20	16	....	41.7
Long Branch	Maximum	71	81	69	66	57	61	59	56	52	67	60	61	60	64	73	56	63	62	58	50	47	34	35	44	37	50	52	39	27	22	....	53.4
	Minimum	53	70	55	49	40	38	42	49	40	37	45	44	46	58	48	43	45	59	43	38	35	26	29	31	29	30	34	29	22	13	....	40.6
Sandy Hook	Maximum	70	72	63	53	52	55	64	50	47	53	64	68	66	58	66	52	48	58	64	46	43	37	37	42	41	51	52	44	31	24	....	50.7
	Minimum	64	60	49	46	42	42	44	46	43	40	45	42	49	63	48	42	46	46	44	40	36	32	31	36	36	37	39	31	18	14	....	41.0

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.160	.096	.008	.088	.080	.096	.024	.028	.080	.048	.000	.000	*	.014	.080	.000	*	*	.030	.000	†	.120	*	*	*	.024	.032	.040	†	†	....	......
	Wind movement	87	67	73	47	49	48	33	68	46	24	36	48	35	62	82	*	87	54	49	24	45	81	71	14	45	68	85	93	99	90	....	1710
Runyon	Evaporation	.105	.090	.040	.020	.080	.085	.080	.040	.120	.110	.120	.120	.025	.000	.020	.060	.000	.000	.060	.060	.080	.030	†	†	.160	†	†	†	†	†	....	......
	Wind movement	36	48	34	37	38	36	31	21	22	19	10	13	10	21	47	66	68	48	54	45	53	50	43	43	49	39	41	199	73	193	....	1469

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

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UNIVERSITY OF ILLINOIS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. DECEMBER, 1929. No. 12

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The mean temperature, while 0.9 degree above normal, was colder than the past two months of December, but was uneventful in every respect. The month opened with temperatures considerably below normal but closed with them well above. Cold periods were from the 1-5th, 11-12th, and 21st-26th, inclusive, and warmer weather prevailed on the 6-9th, 14-20th, and 27th-31st, inclusive. The lowest temperature was only two degrees ower than the lowest recorded in November.

Precipitation averaged slightly over three inches, or only three-ourths of the normal amount. Two stations, however, received lightly more than the normal amount. The heaviest rain fell generally on the 18th or 18-19th, except in the extreme southeast portion where the heaviest amounts occurred on the 2d or 2-3d. The snowfall averaged 4.1 inches, an amount heavier than that ecorded during December of the past two years. A few stations n the central and southeast portions did not report more than trace on the ground at any time.

The number of cloudy days, 14, has been equalled only three imes and exceeded but once in the last 43 years. No damaging vind or hail storms were reported. R. C. C. Jr.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 33 stations, was 33.8°, which was 0.9° above ormal. The highest temperature was 68° at Pleasantville and uckerton on the 15th, and the lowest, 2°, at Culvers Lake and ewton on the 12th. The greatest daily range of temperature as 38° at Sussex on the 6th. The highest monthly mean temerature was 39.5° at Cape May City, and the lowest, 29.4° at ussex.

The temperature departure from the normal for the year, 1929, o date, by sections, is: The Highlands, +1.0°; Red Sandstone lain, +0.7°; Southern Interior, +1.1°; Sea Coast, +1.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from obervations of 40 stations, was 3.01 inches, which was 1.08 inches elow normal. The average total snowfall at eighteen selected ations was 4.1 inches. The greatest monthly precipitation as 4.34 inches, at Woodcliff Lake, and the least, 1.00 inch at sbury Park. The greatest amount of precipitation in any 24 onsecutive hours was 1.54 inches at Boonton on the 19th. The ean of the number of days on which 0.01 inch or more of prepitation fell was 10, or 1 more than normal.

The precipitation accumulated departure from the normal for e year 1929, to date, by sections, is: The Highlands, —1.71 ches; Red Sandstone Plain, —3.12 inches; Southern Interior, 2.56 inches; Sea Coast, —7.34 inches.

WIND.

The prevailing wind direction was from the west. The wind movement averaged 11 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 60 miles per hour from the northeast at Atlantic City on the 23d. High winds also occurred in various sections on the 20th, 21st, 23d and 31st.

MISCELLANEOUS.

The per cent of possible sunshine was 46, or 6 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.07 inches, which was 0.03 inch below the normal. The highest reading was 30.69 inches on the 12th at Sandy Hook, and the lowest was 29.45 inches on the 29th at Verona.

The mean stage of the Delaware River at Phillipsburg was 3.3 feet, and the highest was 8.0 feet on the 25th and 26th. The mean stage at Trenton was not determined as the river around the gage was frozen on 21 days.

Dense fog occurred on the following dates: 7, 8, 13, 14, 16, 17, 18, 19, 20, 28 and 29. Sleet was recorded on the following dates: 2, 3, 12, 13, 16, 17, 23 and 24. Light hail fell in portions of the State on the 2d, 12th, 13th, 23d and 24th. Several thunderstorms were noted on the 18th and 19th.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	35.3	60	6	3.15	4.33	2.47	......	......	......	......	......
1886	29.1	60	−2	3.51	4.65	1.62	......	......	......	......	......
1887	33.7	62	6	5.29	7.32	3.64	......	......	......	12	10
1888	34.9	65	5	3.69	4.95	2.05	......	......	......	8	8
1889	**41.5**	71	8	1.62	3.69	*0.25*	......	......	......	9	9
1890	30.9	56	3	3.89	5.74	2.34	......	11	10	10	8
1891	40.9	71	**9**	4.25	5.32	2.25	......	13	9	9	8
1892	30.4	68	1	1.87	3.09	1.30	......	9	11	11	6
1893	34.9	70	5	3.39	4.66	1.67	......	11	10	10	11
1894	34.8	66	−3	4.36	6.39	1.64	......	12	9	10	9
1895	37.2	70	3	2.61	5.42	1.71	0.4	11	9	11	6
1896	31.3	64	−15	*1.43*	*2.70*	0.85	10.7	14	9	8	4
1897	35.1	69	−3	4.90	6.44	3.07	3.4	8	11	12	11
1898	33.3	66	−2	3.53	4.85	2.38	2.0	12	10	9	9
1899	35.5	69	−1	2.11	4.30	1.29	0.5	14	10	7	7
1900	34.4	64	−2	2.59	3.97	1.47	4.1	14	10	7	6
1901	32.6	68	−8	**7.30**	**9.45**	4.87	2.1	12	9	10	11
1902	31.7	62	−11	7.23	8.99	**5.81**	9.1	13	7	11	13
1903	28.6	56	−13	4.08	5.49	3.20	9.2	14	9	8	9
1904	27.0	60	−15	3.19	5.38	2.06	**21.1**	10	7	14	12
1905	36.3	61	5	3.65	5.60	2.58	1.5	14	8	9	7
1906	33.0	70	−5	3.99	6.18	2.70	1.4	9	8	14	13
1907	36.6	70	−3	4.91	7.13	3.55	5.9	12	8	11	9
1908	34.0	**72**	1	3.63	5.26	2.10	7.8	10	8	13	11
1909	29.8	60	−15	4.45	5.51	3.55	12.6	14	8	9	5
1910	26.5	58	−14	2.79	4.60	1.92	11.3	11	10	10	9
1911	38.4	70	2	3.77	5.09	2.94	5.6	10	7	14	11
1912	36.9	68	−1	4.73	6.33	3.40	11.0	12	9	10	9
1913	37.7	63	−11	3.03	4.59	1.47	0.8	13	9	9	7
1914	31.1	66	−9	5.33	9.12	2.99	2.4	10	6	15	12
1915	31.9	64	3	4.82	7.83	2.19	13.6	12	9	10	8
1916	32.3	70	−8	4.61	6.34	3.35	12.6	13	8	10	11
1917	*24.8*	*54*	*−21*	3.18	5.46	1.55	11.5	13	7	11	8
1918	37.5	66	**9**	3.92	4.94	3.21	0.5	12	7	12	10
1919	28.8	67	−18	2.98	5.14	1.84	6.8	10	8	13	12
1920	36.4	69	7	5.10	6.63	2.86	1.0	11	8	12	8
1921	32.3	64	−4	2.37	3.23	1.62	6.2	13	8	10	9
1922	32.5	65	−8	3.86	5.26	3.09	7.3	9	9	13	12
1923	40.8	69	**9**	4.14	5.14	2.44	2.6	13	7	11	12
1924	32.8	68	−4	2.58	3.42	1.85	0.4	10	8	13	8
1925	34.0	61	−5	2.84	4.58	1.08	0.6	13	7	11	10
1926	28.4	52	−7	3.44	4.74	1.67	8.2	11	7	13	11
1927	35.3	70	2	4.54	5.76	2.80	*T.*	13	6	12	12
1928	36.3	63	3	1.64	4.63	0.69	2.7	15	5	11	8
1929	33.8	68	2	3.01	4.34	1.00	4.1	11	6	14	10

W. B. O. Philadelphia-1-23-30-830.

Climatological Data for December, 1929

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	30.2	−0.4	51	14†	8	26	30	4.26	+0.19	1.15	8.8	11	11	6	14	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	37	30.4	+0.6	51	7†	6	12	30	3.65	−0.68	0.97	6.0	14	6	6	19	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	28	......	......	......	......	2	12	....	2.85	−0.81	0.65	10.6	13	8	6	17	e.	Brice E. Riker.
Dover	Morris	600	45	30.2[b]	+0.3	57[b]	15	10[a]	12	27[b]	3.39	−0.91	1.20	6.5	10	7	8	16	......	William C. Harris
Layton††	Sussex	480	28	28.8	+1.4	59	15	5	4†	33	2.27	−1.67	0.44	9.5	11	8	4	19	sw.	A. M. Depue.
Long Valley	Morris	......	....	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	45	30.0	−0.1	52	14†	2	12	30	2.55	−1.16	0.65	8.0	11	8	5	18	sw.	Irving J. Kern.
Phillipsburg	Warren	363	46	31.4	+0.1	55	15	11	26	29	2.47	−1.27	0.65	8.9	7	11	9	11	......	Town Engineer.
Sussex	Sussex	442	34	29.4	−0.5	52	15	5	4†	38	2.61	−0.95	0.55	10.0	14	8	5	18	w.	A. J. W. Mowatt
Means and extremes	......	......	....	30.3	0.0	57	15	2	12	38	3.11	−0.80	1.20	8.4	11	8	7	16	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	31	37.0	+4.0	60	31	14	11	28	2.06	−2.32	0.80	5.0	9	11	8	12	se.	William Mann.
Boonton	Morris	400	§39	30.4	−0.1	58	17	7	26	34	3.47	−0.51	1.54	......	12	4	8	19	sw.	John Kline.
Chatham	Morris	185	25	......	......	......	......	......	......	....	4.12	−0.05	1.35	8.0	12	13	2	16	......	Paul Molitor, Sr.
Elizabeth	Union	45	50	33.1[a]	−0.2	58	14	13[a]	12†	28[a]	2.46	−1.50	0.82	5.7	10	14	7	10	sw.	Union County Park Com.
Flemington	Hunterdon	140	§43	32.4	+0.4	62	15	8	26	35	3.49	−0.27	1.22	9.0	10	13	4	14	w.	Hiram E. Deats.
Jersey City	Hudson	10	31	35.8	+1.7	56	14	14	12	26	3.15	−0.78	1.00	6.7	12	7	10	14	w.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	42	32.2	−1.4	57	15	12	1	30	3.30	−0.57	1.38	8.2	14	15	2	14	e.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§26	31.6	+0.1	60	15	9	12†	33	3.46	−0.63	0.98	5.0	13	9	9	13	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	76	33.4	+0.2	59	15	13	12†	29	2.93	−0.74	1.05	3.8	8	11	9	11	w.	N. J. Experiment Station
New Milford‡‡	Bergen	9	11	......	......	......	......	......	......	....	2.93	......	1.00	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	58	33.4	+0.3	54	14†	12	12	25	3.40	−0.66	1.12	10.5	11	11	8	12	nw.	Marion T. Probert.
Plainfield	Union	120	41	33.2	+0.5	57	14	11	26	28	3.67	−0.39	1.53	8.5	13	8	7	16	ne.	E. D. Pearson.
Ridgefield	Bergen	80	12	31.8	......	55	14†	9	12	26	3.24	......	0.98	8.8	13	7	9	15	w.	George P. Kirsten.
Somerville	Somerset	70	46	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Arthur Gerlich.
South Orange	Essex	200	57	32.3	+0.2	58	14†	12	12	29	2.68	−1.24	0.84	6.5	8	5	8	18	w.	Everett W. Bird.
Verona	Essex	490	3	32.2	......	55	15	10	11†	29	3.59	......	1.22	8.3	13	5	10	16	w.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	11	......	......	......	......	......	......	....	4.34	......	1.06	......	11	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	59	36.1	+1.1	55	15	14	12	29	3.23	−0.39	1.08	4.3	11	6	8	17	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	33.0	+0.5	62	15	7	26	35	3.27	−0.80	1.54	7.2	11	10	7	14	w.	
The Southern Interior.																				
Belleplain	Cape May	30	35	35.6[d]	+0.5	67[c]	15†	7[d]	1	34[d]	2.45	−1.50	1.00	0.4	8	9[c]	2[c]	17[c]	sw.	A. F. Waldron.
Bridgeton	Cumberland	90	47	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Paul T. Kornman.
Burlington	Burlington	12	§43	35.4	+1.6	62	19	14	1	33	3.59	−0.73	1.53	2.2	11	13	3	15	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	35	33.7	+1.1	60	15†	11	4	33	2.69	−1.00	0.60	T.	7	15	4	12	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	40	36.2	+2.4	66	15†	11	1†	35	2.39	−2.01	0.38	4.0	10	11	6	14	w.	James M. Armstrong.
Lakewood	Ocean	54	25	35.2	+1.7	62	19	14	1	30	2.59	−2.05	0.62	T	9	14	2	15	sw.	R. W. Holman.
Moorestown	Burlington	......	66	34.6	+1.1	64	19	15	1†	30	3.79	+0.10	1.25	2.8	8	11	4	16	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	22	......	......	......	......	......	......	....	2.30	−1.82	0.91	T.	9	....	....	....	......	William L. Flick.
Pleasantville‡‡	Atlantic	26	§31	36.6	......	68	15	11	1†	33	2.43	−1.81	1.15	......	7	17	2	12	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	5	......	......	......	......	......	......	....	3.30	......	0.98	......	8	18	3	10	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	57	35.0	+0.2	60	15	14	12	29	3.08	−0.27	1.41	2.9	9	9	6	16	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	4	......	......	......	......	......	......	....	3.27	......	1.20	2.9	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	36	37.2	+2.8	68	15	10	1	33	2.70	−1.81	0.90	T.	11	14	5	12	nw.	John H. Brown.
Vineland	Cumberland	109	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	William Pfeffer.
Philadelphia, Pa.	......	117	58	38.2	+1.9	65	19	16	1	26	2.98	−0.45	1.37	2.8	8	6	9	16	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	35.5	+1.4	68	15	7	1	35	2.88	−1.29	1.53	1.5	9	13	4	14	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	40	36.9	+1.9	63	19	16	1	26	1.00	−2.85	0.33	T.	6	19	5	7	nw.	Information Bureau.
Atlantic City	Atlantic	16	56	39.2	+2.8	66	15	16	1	24	2.67	−1.27	1.18	0.1	9	11	5	15	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	45	39.5	+1.5	64	14	18	1	24	1.68	−2.06	1.15	0.5	10	9	13	9	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	20	36.0	+1.9	60	15	14	1	24	3.26	−1.48	0.69	5.1	11	11	6	14	w.	William D. Martin.
Sandy Hook	Monmouth	22	31	35.0	+0.6	54	15	17	1	22	3.19	−0.85	0.92	1.6	9	6	9	16	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	37.3	+1.7	66	15	14	1	26	2.36	−1.70	1.18	1.5	9	11	8	12	w.	
For the State	......	......	....	33.8	+0.9	68	15	2	12	38	3.01	−1.08	1.54	4.1	10	11	6	14	w.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for December, 1929

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	....	.45	....	....	....	....	....	.50	....	....	....	.04	1.15	.13	....	....	....	.68	.25	....	....	....	.54	....	....	....	....	.38	.06	.08	....	4.26
Charlotteburg	Passaic	....	.32	....	....	....	....	....	.05	....	....	.02	T.	.51	.23	....	....	.13	.57	.97	.04	....	....	.12	.13	....	....	....	.40	.14	.02	....	3.65
Culvers Lake	Delaware	....	.38	T.	....	....	....	....	.03	....	T.	T.	.08	.65	.06	....	....	.12	.50	.20	T.	....	....	.25	.13	....	....	....	.38	.05	.02	....	2.85
Dover	Passaic	....	.55	....	....	....	....	....	....	....	....	....	*	.67	....	....	....	.15	1.20	.24	....	....	....	.15	....	....	....	....	.22	.16	.05	....	3.39
Layton	Delaware	....	.44	....	....	....	....	....	.11	....	....	....	.08	.43	.11	....	....	.05	.04	.19	T.	....	....	.36	.17	....	....	....	.29	T.	....	....	2.27
Long Valley	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Newton	Delaware	....	.38	....	....	....	....	....	....	....	....	T.	.22	.22	....	....	....	.26	.65	.11	....	....	....	.23	.05	....	....	....	.36	.05	.02	....	2.55
Phillipsburg	....do	....	.48	....	....	....	....	T.	T.	....	....	....	.11	.41	T.	....	....	.12	.65	T.	....	....	....	.29	T.	....	....	....	.41	....	T.	....	2.47
Sussex	Hudson	....	.55	.11	....	....	....	....	....	....	....	.05	....	.30	.11	.10	....	.05	.16	.16	....	....	....	.22	.03	....	....	....	.51	.22	.04	....	2.61
The Red Sandstone Plain.																																	
Bayonne	Coast	....	.06	....	....	....	T.	....	....	....	....	T.	.20	....	....	....	....	.08	.80	.10	....	....	....	....	.30	....	....	....	.10	.40	.02	....	2.06
Boonton ‖	Passaic	....	....	.39	....	....	....	....	.02	....	....	....	T.	.29	.35	....	....	.02	.14	1.54	.10	....	....	....	.17	....	....	....	.09	.27	.09	....	3.47
Chatham ‖	....do	....	....	.58	....	....	....	....	....	....	....	....	.04	.14	.58	....	....	.08	.32	1.35	.21	....	....	....	.37	....	....	....	.12	.29	....	.04	4.12
Elizabeth	Coast	....	.50	....	....	....	....	....	....	....	....	T.	.10	.12	....	....	....	.13	.82	.34	....	....	....	.25	.16	....	....	....	.01	.03	T.	....	2.46
Flemington	Raritan	....	.58	T.	....	....	....	....	T.	....	....	....	T.	.45	.06	....	....	.08	1.22	.41	....	....	....	.28	T.	....	....	....	.23	.16	.02	....	3.49
ersey City	Coast	....	.54	....	....	....	....	T.	....	....	....	.01	.14	.50	.01	....	T.	.03	1.00	.20	....	....	....	.31	.03	....	....	....	.08	.30	T.	....	3.15
Lambertville	Delaware	....	.42	....	....	....	....	....	.03	....	....	....	.04	.40	.02	....	....	.02	1.38	.14	.01	....	....	.41	.03	....	....	....	.06	.30	.04	....	3.30
Little Falls. ‖	Passaic	....	....	.42	....	....	....	....	.01	....	....	....	.01	.46	.26	....	....	.06	.27	.98	.21	....	....	.34	....	....	....	....	.06	.28	.10	T.	3.46
New Brunswick	Raritan	....	.50	T.	....	....	....	T.	....	....	....	T.	T.	.43	T.	....	....	T.	1.05	.31	....	....	....	.27	.02	....	....	....	.06	.29	T.	....	2.93
New Milford.**	Hackensack	....	....	.38	....	....	....	....	....	....	....	....	....	.81	....	....	....	.07	1.00	.14	....	....	....	....	.04	.06	....	....	.18	.25	....	....	2.93
Paterson	Passaic	....	.40	....	....	....	....	T.	....	....	....	.02	.05	.50	.22	....	....	.08	1.12	.30	T.	....	....	....	.25	....	....	....	.25	T.	.21	....	3.40
Plainfield	Raritan	....	.48	....	....	....	....	....	....	....	....	.01	.14	.56	.03	....	....	.06	1.53	.20	....	....	....	.30	.01	....	....	....	.12	.22	.01	....	3.67
Ridgefield**	Hackensack	....	.48	....	....	....	....	....	.02	....	....	.03	.15	.60	....	....	T.	.04	.56	.42	.21	....	....	.25	.05	....	....	....	T.	.42	.01	....	3.24
omerville	Raritan	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
outh Orange	Rahway	....	.45	T.	....	....	....	....	....	....	....	T.	T.	.45	.10	....	....	....	.84	.34	T.	....	....	.15	T.	....	....	....	.10	.25	T.	....	2.68
Verona**	Passaic	....	.52	....	....	....	....	T.	.02	....	....	.01	.29	.39	.01	....	....	.09	1.22	.32	....	....	....	.32	.04	....	....	....	.20	.24	....	....	3.59
Woodcliff Lake**	Hackensack	....	.48	....	....	....	....	....	....	....	....	.03	.98	....	....	....	....	.12	.35	1.06	.21	....	....	.22	....	....	....	....	.36	.32	.21	....	4.34
New York, N. Y***	Coast	....	.52	....	....	....	....	T.	....	....	....	.01	.30	.34	.01	....	T.	.03	1.07	.22	....	....	....	.36	....	....	....	....	.08	.29	T.	....	3.23
The Southern Interior..																																	
elleplain	Tuckahoe	.20	1.00	....	....	....	....	....	....	....	....	T.	.01	T.	T.	....	T.	....	.40	T.	....	....	....	.40	.20	....	....	....	....	.20	.04	....	2.45
ridgeton	Coast	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
urlington	Delaware	....	.43	.02	....	....	....	....	....	....	....	....	T.	.38	.02	....	....	....	1.53	.17	....	....	....	.28	.10	....	....	....	.05	.54	.07	....	3.59
layton	Delaware	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ightstown	Raritan	....	.36	....	....	....	....	....	....	....	....	....	T.	.37	....	....	....	....	.40	.38	....	....	....	.60	.12	....	....	....	T.	.46	T.	....	2.69
ndian Mills	Mullica	....	.36	.38	....	....	....	....	....	T.	....	....	T.	.28	....	....	T.	....	.22	.20	....	....	....	.30	.18	T.	....	....	.02	.38	.07	....	2.39
akewood	Metedeconk	....	.53	.10	....	T.	....	....	....	....	....	....	T.	.30	....	....	....	....	.40	.02	....	....	....	.62	....	....	....	....	.02	.58	.02	....	2.59
Moorestown ‖	Delaware	....	....	.56	....	....	....	....	....	....	....	....	T.	.25	T.	....	....	....	.69	1.25	....	....	....	.10	.30	....	....	....	....	.62	T.	.02	3.79
orthfield	Coast	....	.91	.24	....	....	....	....	....	....	....	.09	.09	....	....	....	....	....	.07	....	....	....	....	.73	.02	....	....	....	....	.14	.01	....	2.30
Pleasantville ‖	Coast	....	....	1.15	....	....	....	....	T.	....	....	....	T.	.26	.02	....	....	T.	....	.12	....	....	....	.07	.72	....	....	....	....	T.	.09	....	2.43
unyon	Coast	....	.45	....	....	....	....	....	....	....	....	....	....	.43	....	....	....	....	.98	.08	....	....	....	.65	.18	....	....	....	.06	.47	....	....	3.30
renton***	Delaware	....	.44	....	....	....	....	T.	....	....	T.	T.	.25	.20	....	....	....	....	1.40	.01	....	....	....	.38	T.	....	....	....	.03	.33	.04	....	3.08
renton No. 2 ‖	Delaware	....	....	.42	....	....	....	....	T.	....	....	....	....	.38	.08	....	....	T.	.32	1.20	T.	....	....	.02	.44	....	....	....	T.	.19	.20	.02	3.27
uckerton	Coast	....	.90	.06	....	....	....	....	....	....	....	....	....	.32	.02	....	.02	....	.03	.10	....	....	....	.55	.38	....	....	....	....	.30	.02	....	2.70
ineland	Maurice	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
hila., Pa***	Delaware	....	.48	....	....	....	....	....	....	....	....	....	.08	.08	T.	....	....	T.	1.37	T.	T.	....	....	.55	....	....	....	....	.05	.35	.02	....	2.98
The Sea Coast.																																	
sbury Park	Coast	....	.07	....	....	....	....	....	....	....	....	T.	.09	.06	....	....	....	....	.31	T.	....	....	....	.33	....	....	....	....	....	.14	T	....	1.00
lantic City***	....do	....	1.18	....	....	....	....	T.	....	....	....	T.	.17	.02	....	....	.02	....	.14	.01	....	....	....	.89	....	....	....	....	T.	.23	.01	....	2.67
pe May City	....do	....	1.02	.13	....	....	....	....	.01	....	....	T.	.04	.01	T.	....	....	....	.06	T.	....	....	....	.37	.01	....	....	....	T.	.03	.04	....	1.72
ong Branch	....do	....	.50	....	....	T.	....	.02	....	....	....	T.	.38	.27	....	....	T.	.06	.40	.20	.03	....	....	.69	....	....	....	....	T	.69	.02	....	3.26
ndy Hook***	....do	....	.46	....	....	....	....	T.	....	....	....	T.	.35	.35	....	....	T.	.03	.92	T.	T.	....	....	.56	02	....	....	....	.04	.46	T	....	3.19

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip- ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	30.08	30.61	12	29.55	29	14.8	60	ne.	23	81	73	77	52
ng Branch	30.06	30.66	12	29.47	29	......	......	......	......	76	74	70	......
oorestown	......	......	......	......	......	......	......	......	......	84	72	78	......
w York, N. Y	30.07	30.68	12	29.54	20	13.4	48	nw.	31	74	71	69	44
iladelphia, Pa	30.09	30.67	12	29.53	19	10.9	37	ne.	23	74	67	68	42
lgefield	30.07	30.67	12	29.53	20	......	......	......	......	......	......	......	......
ndy Hook	30 06	30.69	12	29.48	29	12.9	44	ne.	23	81	76	76	39
enton	30.07	30.66	12	29.52	19	8.6	30	w.	21	79	67	72	46
rona	......	30.68	12	29.45	29	6.8	32	w.	21	76	65	71	......

Daily Temperatures for December, 1929

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	29	28	32	26	37	46	44	49	42	38	32	25	34	51	51	42	45	45	46	41	28	33	31	31	32	32	38	39	39	37	50	37.8
	Minimum	12	18	20	9	15	16	18	31	27	24	23	9	17	32	34	26	32	34	35	23	18	18	16	21	17	8	27	31	33	27	28	22.5
Charlotteburg	Maximum	30	29	31	29	37	48	51	51	43	37	32	22	34	51	50	42	35	45	48	45	33	31	30	29	31	36	43	42	44	36	46	38.4
	Minimum	12	11	21	12	18	19	21	39	22	22	15	6	18	33	34	24	25	35	40	24	14	17	19	20	15	12	26	35	32	25	33	22.5
Dover	Maximum	30	30	33	26	38	48	51	50	42	33	30	28	36	54	57	47	38	48	49	45	....	....	27	24	32	36	42	46	37	36	48	36.8^b
	Minimum	12	16	19	12	19	24	24	32	25	23	11	10	28	35	33	26	....	38	43	19	18	26	18	21	19	13	25	35	32	26	29	23.7^a
Layton	Maximum	34	24	32	26	37	48	45	48	46	31	29	15	34	50	59	39	33	44	44	44	27	33	26	28	32	36	40	40	37	57	45	37.5
	Minimum	8	13	16	5	16	15	18	28	21	21	12	5	15	33	32	25	25	32	33	20	15	17	15	21	15	5	28	33	32	24	29	20.2
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	31	26	32	26	38	49	50	48	46	45	40	37	30	52	52	46	35	45	48	47	37	32	28	29	32	34	39	40	40	37	48	39.3
	Minimum	10	17	20	11	16	25	30	27	26	22	10	2	10	28	34	22	23	32	31	17	17	15	12	18	16	14	25	34	31	25	26	20.8
Phillipsburg	Maximum	30	28	32	25	38	44	39	48	42	35	33	24	35	53	55	39	38	48	52	52	30	32	30	30	32	37	38	39	39	39	49	38.2
	Minimum	15	22	19	14	22	21	25	31	27	27	20	14	23	34	32	25	29	36	39	23	21	20	21	23	17	11	28	33	33	29	29	24.7
Sussex	Maximum	34	28	33	31	37	51	50	46	40	35	31	22	34	48	52	39	33	44	45	48	30	32	29	29	32	35	37	48	37	37	45	37.8
	Minimum	13	15	15	5	16	13	18	29	20	21	19	5	15	33	35	23	26	32	32	24	18	18	15	20	14	7	26	34	32	26	32	21.0
The Red Sandstone Plain.																																	
Bayonne	Maximum	34	37	32	30	41	56	55	54	46	41	33	34	42	56	51	40	50	53	56	55	30	34	34	37	35	36	43	52	50	42	60	43.5
	Minimum	18	26	17	20	23	36	40	40	35	34	14	15	36	36	40	28	35	42	45	27	20	24	25	28	24	22	35	45	35	31	51	30.4
Boonton§§	Maximum	31	30	34	27	40	49	51	52	44	34	31	33	37	55	56	33	58	49	49	34	29	34	27	31	31	36	43	43	38	45	49	39.8
	Minimum	10	12	17	15	15	19	17	21	23	22	25	9	10	31	31	25	25	30	37	28	19	19	19	19	21	7	8	28	31	27	27	20.9
Elizabeth	Maximum	31	30	36	31	43	51	51	47	45	38	34	29	38	58	56	45	47	49	54	47	31	35	33	32	32	38	40	43	39	38	53	41.1
	Minimum	15	17	17	14	16	25	23	39	38	27	20	13	26	....	37	30	29	40	43	27	20	20	23	22	17	13	24	34	33	28	32	25.1^a
Flemington	Maximum	34	28	35	28	44	55	48	50	46	38	33	28	35	60	62	55	36	46	50	50	32	33	32	33	32	40	40	41	39	38	55	41.2
	Minimum	12	15	19	12	13	20	20	33	26	26	25	14	21	32	28	29	29	35	44	25	21	19	21	22	19	8	19	34	32	28	33	23.7
Jersey City	Maximum	31	31	36	30	40	53	53	52	45	40	35	33	43	56	55	41	49	55	55	52	31	35	34	32	34	38	42	50	42	40	51	42.4
	Minimum	16	24	24	18	22	33	34	35	34	33	18	14	34	38	39	29	34	44	45	26	22	21	25	25	22	22	34	38	34	29	36	29.1
Lambertville	Maximum	27	29	29	22	39	46	52	50	43	36	32	35	35	55	57	40	40	47	53	52	31	30	30	28	31	36	40	40	37	37	47	38.9
	Minimum	12	18	19	13	17	27	33	35	31	27	24	13	24	33	32	29	27	37	46	22	20	18	20	20	18	18	28	35	33	26	31	25.4
Little Falls§§	Maximum	33	30	37	29	42	54	53	52	46	35	30	33	39	58	60	32	40	48	48	33	31	35	28	33	34	39	44	43	39	47	52	40.5
	Minimum	13	16	20	17	19	22	20	26	25	25	26	9	14	32	30	28	27	31	39	29	21	20	9	19	18	12	18	29	32	28	29	22.7
New Brunswick	Maximum	31	29	32	27	41	52	54	52	44	37	34	27	37	57	59	46	40	48	56	53	30	34	32	32	32	39	41	42	40	38	51	40.9
	Minimum	14	16	22	15	19	24	27	35	27	29	23	13	25	33	30	30	29	39	46	26	21	20	24	23	18	13	29	35	33	29	35	25.9
Paterson	Maximum	30	31	35	30	40	47	47	50	45	37	34	25	38	54	54	48	40	48	48	47	30	35	34	32	34	37	42	42	40	39	51	40.1
	Minimum	15	20	20	18	21	28	26	40	30	31	24	12	24	34	29	29	27	40	41	28	22	20	22	24	20	20	31	36	35	29	34	26.8
Plainfield	Maximum	30	29	33	30	40	50	51	52	45	40	35	33	42	57	56	41	49	55	56	52	30	36	34	30	35	38	40	50	42	40	50	42.0
	Minimum	14	14	23	14	19	22	23	28	25	27	18	12	30	33	30	29	28	39	46	25	20	19	23	23	17	11	26	34	30	29	29	24.5
Ridgefield	Maximum	30	28	33	25	39	48	48	47	45	31	31	30	37	55	55	38	39	54	54	48	29	34	27	30	31	37	39	39	36	38	50	39.0
	Minimum	14	20	20	15	21	25	23	30	29	28	10	9	24	35	33	26	28	38	41	22	21	20	21	22	20	16	30	33	32	28	31	24.7
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
South Orange	Maximum	31	29	35	31	40	49	52	54	44	37	34	24	36	58	58	56	39	46	50	47	30	35	31	31	32	39	41	42	37	37	51	40.5
	Minimum	13	15	21	14	17	23	23	38	25	24	21	12	23	33	29	28	27	38	42	26	18	18	21	21	14	14	25	35	33	27	28	24.1
Verona	Maximum	29	29	32	25	37	47	52	50	43	32	30	28	36	54	55	38	42	52	52	49	28	38	25	29	32	37	42	41	36	37	48	38.9
	Minimum	13	20	20	15	20	31	35	32	31	28	10	10	28	33	33	26	26	40	41	20	19	18	20	21	20	20	30	36	33	27	32	25.4
New York, N. Y.	Maximum	32	36	38	28	40	54	53	53	45	40	35	34	43	55	55	42	49	55	55	53	32	35	33	33	34	38	42	50	42	40	51	42.7
	Minimum	16	26	24	18	22	35	37	36	35	34	15	14	34	39	39	29	34	45	44	24	22	21	25	25	22	24	35	39	34	29	37	29.5
The Southern Interior.																																	
Belleplain	Maximum	33	33	33	29	45	....	....	....	50	55	40	34	43	66	67	55	57	58	67	60	32	30	43	44	36	43	53	52	44	47	55	46.6^c
	Minimum	7	9	21	15	12	....	....	....	21	29	25	20	30	32	33	37	33	42	51	27	12	16	26	....	11	15	30	37	33	26	28	24.7^d
Bridgeton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Burlington	Maximum	30	31	32	30	43	55	59	53	47	38	35	30	38	61	59	59	40	53	62	61	31	32	38	38	33	39	43	40	40	40	50	43.2
	Minimum	14	22	23	18	23	25	29	36	27	31	30	17	25	33	37	28	30	38	51	28	24	22	28	23	21	15	30	32	34	30	35	27.7
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	30	31	30	27	42	55	58	55	45	38	35	28	38	57	60	54	44	54	60	52	29	34	36	34	34	40	42	40	38	39	50	42.2
	Minimum	14	13	19	11	19	24	25	34	26	23	25	14	24	32	28	36	29	37	50	26	22	19	24	22	20	12	31	30	32	26	34	25.2
Indian Mills	Maximum	30	32	32	30	43	60	60	57	45	44	39	33	43	62	66	66	54	56	64	64	32	31	40	40	33	41	48	48	41	42	52	46.1
	Minimum	11	11	23	15	15	25	29	39	23	31	20	17	28	38	34	33	31	42	52	29	14	18	25	25	18	15	30	32	32	27	30	26.2
Lakewood	Maximum	29	32	32	26	39	54	59	55	45	42	34	32	42	58	61	51	51	56	62	54	30	31	40	40	34	34	48	46	38	39	50	43.4
	Minimum	14	13	22	17	18	24	32	34	25	25	29	18	32	37	31	32	32	45	49	27	20	21	28	25	21	17	28	31	32	27	35	27.1
Moorestown	Maximum	32	32	31	28	44	57	60	56	45	37	32	32	38	61	62	40	43	56	64	52	31	31	36	29	33	39	41	40	37	42	50	42.3
	Minimum	15	15	23	17	23	27	33	34	30	28	15	15	32	36	32	30	30	40	54	25	22	21	24	21	19	16	34	32	33	29	30	26.9
Pleasantville§§	Maximum	32	34	30	31	47	60	59	62	49	50	36	43	45	66	68	40	53	55	59	34	33	39	45	32	36	44	56	52	40	46	54	46.1
	Minimum	11	11	22	16	18	27	32	39	23	28	30	21	24	39	36	38	35	39	47	32	17	18	24	24	18	18	24	34	33	27	31	27.0
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	29	32	32	27	44	56	60	52	46	38	33	31	41	59	60	40	42	56	59	54	30	32	34	31	33	42	44	43	38	41	50	42.2
	Minimum	15	22	21	16	23	30	35	35	32	31	15	14	31	36	34	29	30	41	50	25	22	21	24	22	22	20	32	36	33	29	36	27.8
Tuckerton	Maximum	32	35	35	32	46	61	57	60	55	48	45	35	45	65	68	63	51	53	55	56	33	34	45	43	36	35	52	53	48	41	54	47.5
	Minimum	10	15	20	15	18	28	30	35	25	29	29	25	32	37	37	34	34	42	46	29	16	15	25	22	19	19	30	32	30	25	31	26.9
Vineland	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Philadelphia, Pa.	Maximum	32	34	35	29	44	54	59	56	47	41	38	34	40	63	62	44	49	57	65	54	34	34	37	33	35	40	44	47	41	44	52	44.5
	Minimum	16	26	25	20	28	36	37	42	36	37	21	19	34	39	42	33	34	45	54	28	24	25	26	26	26	27	36	41	35	31	37	31.8
The Sea Coast.																																	
Asbury Park	Maximum	35	34	33	26	46	52	59	56	46	43	39	39	44	57	61	44	48	52	63	49	37	36	40	40	34	39	49	46	40	40	50	44.4
	Minimum	16	21	22	18	21	31	37	38	32	34	23	21	38	39	39	34	35	43	37	35	22	21	24	25	23	23	25	35	34	28	36	29.4
Atlantic City	Maximum	32	40	34	31	47	58	54	61	50	48	37	46	46	65	66	43	50	53	56	50	31	36	45	32	37	42	47	50	41	45	54	46.0
	Minimum	16	28	24	20	30	40	41	38	35	34	24	23	41	42	42	37	37	44	47	27	25	21	31	26	23	24	40	37	36	32	40	32.4
Cape May City	Maximum	32	38	33	30	47	56	55	57	50	52	37	45	45	64	64	43	54	53	57	49	32	39	46	32	38	43	51	48	44	46	55	46.3
	Minimum	18	29	28	22	31	37	39	34	32	33	28	25	40	41	40	40	38	44	47	30	27	25	31	28	23	25	39	39	34	32	34	32.7
Long Branch	Maximum	29	31	29	25	36	49	53	54	46	42	35	41	43	56	60	42	50	56	56	51	33	35	40	33	35	38	46	44	40	40	50	42.5
	Minimum	14	18	22	17	21	26	30	34	38	33	22	22	40	36	36	34	38	46	46	27	23	24	34	26	25	23	35	33	34	30	31	29.5
Sandy Hook	Maximum	30	32	32	26	39	45	51	48	43	37	35	39	40	51	54	41	47	52	53	48	31	34	36	31	31	35	40	40	38	38	47	40.1
	Minimum	17	26	25	20	25	31	34	36	35	34	18	17	37	38	36	30	33	42	45	26	24	23	27	26	24	25	34	33	35	31	36	29.8

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION,

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXIV. ANNUAL SUMMARY, 1929. No. 13

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The temperature average for the State this year is based on the records of thirty two stations, while the precipitation record was obtained from a total of thirty eight.

A survey of the figures shows that the year opened with a continuance of the mild weather that characterized the closing months of 1928, and this abnormally warm weather continued until May. Beginning with May it turned cool and was either below normal or only very slightly above it for the remainder of the year. The Spring may be said to have been early and wet, while the Summer was cool and dry, followed by a nearly normal Fall.

The average temperature was 1.0° above the normal. This characteristic of the year was fixed mostly by the very warm March, the other eleven month being within two degrees of the normal either way. Temperatures equalling or exceeding the 100-degree mark were noted only twice,-at Newton on July 28th and at Elizabeth on September 4th. Below-zero temperatures were observed on January 14th at Culvers Lake and Newton, and at Culvers Lake, Layton and Sussex on February 24th. The coldest month was January with an average of 30.7°, while July was the warmest with a mean of 73.0°. February and August were close seconds, respectively.

With regard to rainfall the outstanding feature was the wet April, the total of 6.43 inches establishing a record for that month. The average for the year was about three inches below normal. The deficiency, unfortunately, came mostly during the months of July and August. Practically all stations, except along the southern coast, experienced a yearly total of between forty and fifty inches. The extremes were 30 inches at Cape May and 52 inches at Chatham.

The snowfall for the calendar year was much below the usual amount, the average being 16 inches; over nine inches of this amount occurred during February. As usual, decidedly the major portion was in the higher altitudes in the northern portion of the State. The average was only about one-half the yearly normal of 31 inches.

About the only destructive general storms that occurred were the wind storms of April. They prevailed at various times during the month, mostly on the 1st, 10th, 11th and 16th. Many casualties and nearly a half-million dollars of damage resulted.

The prevailing direction for the year was southwest, while the highest velocity reported from the stations having anemometers was 78 miles per hour from the northeast at Atlantic City on April 16th.

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Average precipitation	Average snowfall
	Mean	Highest	Lowest		
1885	50.5	100	−2	37.87	......
1886	50.2	98	−10	46.54	......
1887	51.1	102	−6	47.66	......
1888	50.0	99	−12	52.20	......
1889	52.8	95	−3	**63.33**	......
1890	53.2	101	0	49.34	......
1891	53.2	102	1	47.98	......
1892	51.4	105	−6	42.04	......
1893	50.8	103	−21	47.90	......
1894	53.0	106	−11	47.37	......
1895	51.7	**109**	−12	*37.29*	25.7
1896	51.7	105	−15	42.51	39.5
1897	52.0	102	−6	51.72	25.8
1898	53.2	107	−15	52.35	34.3
1899	52.1	103	−21	45.84	44.3
1900	53.8	104	−9	42.71	23.3
1901	51.4	107	−8	51.80	14.1
1902	51.8	100	−11	59.44	40.1
1903	51.7	100	−16	56.25	22.3
1904	*49.3*	100	**−34**	43.78	48.5
1905	51.3	102	−18	42.06	32.9
1906	52.8	98	−15	46.38	23.[illegible]
1907	50.4	96	−22	51.65	54.1
1908	52.6	106	−17	42.58	35.3
1909	52.0	100	−15	40.86	29.9
1910	52.0	99	−15	39.73	33.3
1911	52.6	104	−12	50.36	30.0
1912	51.8	100	−32	46.61	35.1
1913	**54.2**	100	−11	46.99	5.2
1914	51.4	99	−12	39.23	41.1
1915	52.5	98	−3	47.37	39.4
1916	51.2	100	−18	38.17	49.6
1917	49.6	104	−21	40.80	40.4
1918	51.2	108	−16	37.65	25.3
1919	52.5	103	−12	52.10	10.9
1920	51.2	98	−17	51.87	33.4
1921	54.1	100	−5	38.16	23.0
1922	52.6	98	−11	41.57	30.8
1923	51.9	106	−14	40.38	39.8
1924	50.7	102	−6	44.17	24 3
1925	52.1	103	−20	42.15	26.8
1926	50.0	105	−11	44.41	32.2
1927	52.0	99	−12	49.68	13.7
1928	52.0	99	−15	46.22	21.5
1929	52.3	102	−9	42.96	16.0

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MONTHLY STATE DATA FOR 1929

Month	Temperature				Precipitation					
	Mean	Departure from normal	Highest	Lowest	Average	Departure from normal	Greatest	Least	Snow	Greatest.
January	30.7	+0.9	67	−4	3.49	−0.13	5.03	1.92	1.6	8.9
February	31.6	+2.2	63	−9	4.06	+0.42	5.92	2.76	9.2	15.6
March	44.9	+6.4	81	5	3.07	−0.84	4.92	1.92	0.7	9.7
April	51.1	+1.8	94	25	6.43	+2.69	8.74	4.63	T.	1.0
May	59.9	−0.2	95	26	3.49	−0.26	5.58	1.26	T.	T.
June	69.5	+1.3	98	33	3.11	−0.57	5.41	1.41	0.0	0
July	73.0	−0.4	102	33	1.64	−2.98	3.93	0.51	0.0	0
August	69.8	−2.0	97	39	2.58	−2.21	4.86	0.88	0.0	0
September	67.0	+1.5	100	28	4.74	+1.11	8.24	2.12	0.0	0
October	52.3	−2.6	80	17	4.61	+0.93	7.35	2.62	T.	T.
November	44.5	+1.6	83	4	2.73	−0.32	3.64	2.08	0.4	2.1
December	33.8	+0.9	68	2	3.01	−1.08	4.34	1.00	4.1	10.6
Year	52.3	+1.0	102	−9	42.96	−3.24	8.74	0.51	16.0	15.6

KILLING FROSTS

Stations	Last in spring	First in autumn
The Highlands and Kittatinny Valley		
Belvidere	May 10*	Oct. 9
Charlotteburg	do. 23*	Sept. 19
Culvers Lake	do. 17	Oct. 5
Dover	do. 23	do. 10
Layton	do. 26	Sept. 19
Newton	Apr. 2*	Oct. 10
Phillipsburg	do. 24*	Nov. 7
Sussex	May 23*	Oct. 5*
The Red Sandstone Plain		
Bayonne	Apr. 2*	....
Boonton	May 10*	Oct. 5*
Chatham	do. 10	do. 9
Elizabeth	Apr. 23*	do. 10*
Flemington	do. 24	Nov. 6
Jersey City	Mar. 18*	Oct. 18
Lambertville	Apr. 2*	do. 9
Little Falls	do. 2*	do. 9*
New Brunswick	Mar. 21	do. 10
Paterson	Apr. 2*	do. 10
Plainfield	do. 24	do. 9
Ridgefield	Apr. 2*	Oct. 10*
Somerville	do. 24*	do. 9
South Orange	do. 24*	do. 9*
Verona	do. 2*	do. 11
The Southern Interior		
Belleplain	Apr. 13*	Oct. 9
Burlington	Mar. 21	do. 9
Highstown	Apr. 23	do. 9
Indian Mills	do. 23	do. 11
Lakewood	do. 24*	do. 9
Moorestown	do. 23	do. 11
Pleasantville	do. 24*	do. 11
Trenton	Mar. 18*	do. 11
Tuckerton	do. 29*	do. 9*
The Sea Coast		
Asbury Park	Mar. 18*	Oct. 25
Atlantic City	do. 18*	Nov. 25
Cape May City	do. 11*	do. 22*
Long Branch	do. 18*	Oct 11
Sandy Hook	do. 18*	Nov. 22

* No frost reported; temperature 32° or below.

W. B. O.Philadelphia 2-10-30-1050.

Climatological Data for the Year 1929

STATION	Counties	Elevation, feet	Temperature (degrees Fahrenheit)						Precipitation (inches)							Number days with .01 or more	Sky			Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall (unmelted)		Number clear days	Number partly cloudy days	Number cloudy days	
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	38	51.8	98	July 28	0	Feb. 24	38	49.86	7.15	Apr.	1.97	July	26.6	110	199	55	111	......
Charlotteburg	Passaic	719	37	49.7	97	Sept. 4	0	Jan. 16	37	47.03	7.35	Oct.	1.23	do.	27.3	131	33	72	260	w.
Culvers Lake	Sussex	848	......	......	......	......	−8	Feb. 24	28	43.63	5.93	Apr.	2.28	Mar.	46.5	135	177	75	113	e.
Dover	Morris	600	45	50.1	96	Aug. 1†	0	do. 24	45	44.42	7.27	do.	0.80	July	27.0	115	69	182	114	......
Layton	Sussex	480	28	48.7	99	Sept 3	−9	Feb. 24	28	43 04	5.69	Apr.	1.71	Aug.	39.2	115	147	66	152	sw.
Newton	Sussex	769	46	50.7	102	July 28	−1	Jan. 14	43	39.94	5.74	do.	1.94	Mar.	31.1	108	......	......	......	sw.
Phillipsburg	Warren	363	38	51.6	96	July 28†	2	Feb. 24	46	46.71	7.20	Sept.	0.98	July	22.4	101	204	80	81	......
Sussex	Sussex	442	31	49.8	97	Sept. 3	−8	do. 24	34	42.44	5.65	Apr.	2.52	Mar.	......	125	......	......	......	nw.
Means and extremes	......	......	...	50.3	102	July 28	−9	Feb. 24	......	44.63	7.35	Oct.	0.80	July	31.4	118	138	88	139	sw.
The Red Sandstone Plain.																				
Bayonne	Hudson	37	31	......	......	......	7	Jan. 14	31	......	......	......	......	......	......	......	......	......	......	......
Boonton	Morris	400	21	49.7	95	Sept. 3	3	Feb. 24	39	40.89	7.30	Apr.	0.87	July	......	114	185	23	157	sw.
Chatham	Morris	185	......	......	......	......	......	......	25	52.22	8.07	do.	1.36	do.	21.4	122	208	68	89	......
Elizabeth	Union	45	49	53.3	100	Sept. 4	6	Jan. 14	50	43.44	5.99	do.	1.76	do.	13.6	135	205	73	87	sw.
Flemington	Hunterdon	140	32	52.7	99	Sept. 5	0	Feb. 24	43	47.82	6.35	Apr.	1.79	July	22.0	131	216	56	93	w.
Jersey City	Hudson	10	31	54.0	98	do. 3	7	Jan. 14	31	40.17	5.85	do.	1.05	do.	17.8	119	133	132	100	nw.
Lambertville	Hunterdon	430	42	51.8	97	do. 4	4	do. 14	42	39.63	5.85	do.	1.02	do.	18.7	138	202	57	106	nw.
Little Falls	Passaic	180	15	51.5	99	July 28†	4	Feb. 24	26	47.83	7.60	do.	1.08	do.	13.5	124	163	99	103	nw.
New Brunswick	Middlesex	110	72	53.1	98	Sept. 4	5	Jan. 14†	76	45.08	6.90	Apr.	2.21	Nov.	12.5	122	166	123	76	sw.
New Milford	Bergen	9	......	......	......	......	......	......	11	37.70	6.34	do.	0.83	July	......	105	......	......	......	......
Paterson	Passaic	80	54	53.7	99	July 28	7	Jan. 14	58	43.68	6.75	do.	0.51	do.	25.5	126	212	38	115	sw.
Plainfield	Union	120	38	51.8	99	Sept. 3†	4	Feb. 24	41	47.20	6.90	Sept.	1.63	do.	20.2	131	137	128	100	nw.
Ridgefield	Bergen	80	12	51.8	99	Sept. 3	6	Jan. 14	12	40.94	6.22	Apr.	1.64	Aug.	19.1	115	137	114	114	nw.
Somerville	Somerset	70	45	......	99	do. 3†	1	Feb. 24	6	......	......	......	......	......	......	......	......	......	......	......
South Orange	Essex	200	58	52.4	98	do. 3	5	Jan. 14	58	44.99	6.77	Apr.	1.79	July	14.0	123	127	96	142	w.
Verona	Essex	490	4	50.7	94	July 28	5	do. 14	4	47.69	8.04	do.	0.74	do.	23.7	128	......	......	......	nw.
Woodcliff Lake	Bergen	100	......	......	......	......	......	......	11	45.75	7.49	do.	0.61	......	......	116	......	......	......	......
New York, N. Y.	......	365	59	53.5	94	Sept. 3	7	Jan. 14	59	39.13	5.76	Apr.	0.98	July	15.1	120	81	143	141	......
Means and extremes	......	......	......	52.2	100	Sept. 4	0	Feb. 24	......	44.34	8.07	Apr.	0.51	July	18.5	123	174	84	107	nw.
The Southern Interior.																				
Belleplain	Cape May	30	34	......	97	June 19†	......	......	35	......	......	......	......	......	......	......	......	......	......	......
Burlington	Burlington	12	17	54.6	98	Sept. 2	8	Jan. 14	43	44.93	7.51	Sept.	1.35	July	10.6	127	158	79	128	sw.
Hightstown	Mercer	120	35	52.7	98	July 28†	6	do. 14	36	42.53	8.24	do.	1.27	Aug.	8.5	101	195	76	94	w.
Indian Mills	Burlington	76	40	53.9	99	do. 29†	5	Feb. 24	39	45.75	6.02	do.	1.44	July	13.5	109	131	138	96	sw.
Lakewood	Ocean	54	25	52.8	95	June 18†	6	Feb. 24	25	49.43	8.74	Apr.	2.38	July	8.0	123	159	78	128	sw.
Moorestown	Burlington	75	66	......	......	......	......	......	66	......	......	......	......	......	......	......	......	......	......	......
Moorestown No. 2	Burlington	......	......	53.1	96	June 19†	6	Jan. 14	......	42.26	6.86	Sept.	2.09	July	9.3	122	149	81	135	nw.
Northfield	Atlantic	25	......	......	......	......	......	......	22	37.24	5.92	Apr.	1.19	do.	10.1	108	......	......	......	......
Pleasantville	Atlantic	26	6	52.7	96	June 19	4	Jan. 14	31	40.55	6.14	Apr.	1.14	July	......	110	219	62	84	sw.
Runyon	Middlesex	18	6	......	......	......	......	......	6	47.59	7.80	do.	1.72	Aug.	......	108	203	110	52	w.
Trenton	Mercer	190	57	53.5	95	Sept. 4	7	Jan. 14	57	40.55	7.14	Sept.	0.63	July	11.6	129	108	107	150	sw.
Trenton No. 2	Mercer	45	......	......	......	......	......	......	......	42.64	6.72	do.	0.63	do.	11 6	125	......	......	......	......
Tuckerton	Ocean	23	31	54.1	99	July 9	5	Jan. 14	36	41.42	6.72	Apr.	0.78	do.	10.0	124	214	28	123	sw.
Philadelphia, Pa.	......	117	58	55.9	95	June 19	9	Jan. 14	58	41.56	6.51	Sept.	1.53	July	11.5	118	103	116	146	sw.
Means and extremes	......	......		53.4	99	July 9†	4	Jan. 14	......	43.17	8.74	Apr.	0.63	July	10.4	117	171	84	110	sw.
The Sea Coast.																				
Asbury Park	Monmouth	22	39	52.9	97	June 19	7	Jan. 14	40	37.00	5.30	Apr.	1.00	Dec.	8.5	105	230	67	68	nw.
Atlantic City	Atlantic	16	56	54.0	92	do. 19	8	do. 14	56	36.05	5.63	do.	1.20	July	8.1	120	130	122	113	sw.
Cape May City	Cape May	17	45	54.4	91	July 10	12	do. 14	45	29.81	4.76	Feb.	1.26	May	12.1	117	129	118	118	s.
Long Branch	Monmouth	25	21	52.2	96	Sept. 3	5	do. 14	21	45.51	7.84	Apr.	0.94	Aug.	14.3	133	134	114	117	nw.
Sandy Hook	Monmouth	22	31	52.8	93	do. 3	9	do. 14	31	39.84	5.08	do.	0.88	do.	9.4	126	106	119	140	sw.
Means and extremes	......	......	......	53.3	97	June 19	5	Jan. 14	.....	37.64	7.84	Apr.	0.88	Aug	10.5	120	146	108	111	sw.
For the State	......	......	......	52.3	102	July 28	−9	Feb. 24	......	42.96	8.74	Apr.	0.51	July	16.0	118	162	87	116	sw.

† Also on other dates

Monthly and Annual Precipitation for the Year 1929, with Departures from the Normal

STATIONS	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
he Highlands and Kittatinny Valley.																										
elvidere	4.65	+1.11	4.81	+0.97	2.65	-1.20	7.15	+3.49	3.66	-0.17	3.77	-0.23	1.97	-3.01	4.16	-0.45	4.05	+0.28	5.65	+1.98	3.08	-0.16	4.26	+0.19	49.86	+2.80
harlotteburg	5.03	+1.48	3.07	-0.95	2.76	-1.44	7.17	+2.85	3.88	-0.32	3.76	-0.36	1.23	-3.60	2.30	-2.32	3.92	-0.50	7.35	+2.88	2.91	-0.61	3.65	-0.68	47.03	-3.57
ulvers Lake	3.10	-0.08	3.60	+0.54	2.28	-1.19	5.93	+2.11	3.49	-0.14	3.70	-0.91	3.93	-0.64	4.18	-0.24	4.77	+0.23	3.25	-0.93	2.55	-0.25	2.85	-0.81	43.63	-2.31
over	4.50	+0.11	3.94	-0.09	2.61	-1.38	7.27	+3.51	3.47	-0.47	4.46	+0.43	0.80	-4.47	1.52	-3.24	4.98	+0.89	4.88	+0.81	2.60	-1.04	3.39	-0.91	44.42	-5.85
ayton	2.62	-0.27	3.34	+0.60	3.56	+0.19	5.69	+2.08	3.66	+0.41	4.03	+0.24	3.76	-0.50	1.71	-2.19	5.40	+1.48	3.88	+0.26	3.12	+0.63	2.27	-1.67	43.04	+1.26
ong Valley	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
ewton	3.07	-0.54	2.76	-0.80	1.94	-1.63	5.74	+2.37	2.80	-1.13	5.41	+1.43	2.75	-2.21	3.09	-1.33	3.49	-0.31	3.81	+0.18	2.53	-0.58	2.55	-1.16	39.94	-5.71
hillipsburg	3.42	-0.18	4.13	+0.49	2.16	-1.38	6.90	+3.64	2.97	-0.89	4.60	+0.97	0.98	-3.87	4.08	-0.54	7.20	+2.54	4.84	+1.28	2.96	0.24	2.47	-1.27	46.71	+0.55
ussex	2.87	-0.61	3.20	-0.18	2.52	-1.07	5.65	+2.21	4.02	+0.30	4.20	+0.52	3.02	-1.38	3.71	-0.55	3.60	-0.30	3.95	+0.51	3.09	-0.16	2.61	-0.95	42.44	-1.66
The Red Sandstone Plain.																										
ayonne	2.88	-1.01	4.90	+0.92	4.19	+0.19	5.69	+1.30	4.19	+0.23	1.88	-1.90	1.00	-3.61	1.70	-3.36	......	......	......	......	2.21	-1.06	2.06	-2.32	......	......
oonton	3.76	-0.07	2.88	-1.09	2.77	-1.17	7.30	+3.31	3.97	-0.09	2.15	-1.52	0.87	-4.03	1.70	-3.38	4.75	+0.62	4.86	+0.95	2.41	-1.16	3.47	-0.51	40.89	-8.14
hatham	4.43	+0.74	5.92	+2.49	4.62	+0.58	8.07	+3.97	5.14	+1.64	2.84	-1.22	1.36	-3.08	2.89	-1.52	4.24	-0.05	5.89	+1.18	3.20	+0.30	4.12	-0.05	52.22	+4.98
lizabeth	3.25	-0.79	4.50	+0.33	4.38	+0.16	5.99	+2.31	3.71	-0.11	2.02	-1.60	1.76	-3.40	3.20	-1.09	5.47	+1.70	4.26	+0.37	2.44	-0.81	2.46	-1.50	43.44	-4.43
lemington	3.58	-0.11	3.96	+0.42	3.04	-0.85	6.35	+2.83	4.04	+0.02	3.48	-0.36	1.79	-3.43	3.56	-1.15	7.11	+3.21	4.21	+0.55	3.21	+0.09	3.49	-0.27	47.82	+0.95
rsey City	3.01	-0.49	4.39	+0.67	3.67	-0.48	5.85	+1.69	3.97	+0.39	2.55	-0.95	1.05	-3.39	1.27	-3.26	3.94	+0.59	5.18	+1.50	2.14	-1.05	3.15	-0.78	40.17	-5.56
ambertville	3.91	+0.26	3.83	+0.35	2.60	-1.43	5.85	+2.27	3.16	-0.86	2.15	-1.76	1.02	-3.80	1.96	-2.70	4.36	+0.47	4.85	+1.37	2.64	-0.57	3.30	-0.57	39.63	-6.97
ttle Falls	4.06	+0.36	4.41	+0.94	3.53	-0.06	7.60	+3.48	4.15	+0.36	3.41	-0.11	1.08	-3.31	3.29	-1.11	3.54	-0.04	6.37	+1.86	2.93	+0.03	3.46	-0.63	47.83	+1.77
ew Brunswick	2.78	-1.01	3.69	+0.07	2.22	-1.59	6.90	+3.16	3.93	+0.04	5.37	+1.61	2.94	-2.10	2.41	-2.74	5.59	+1.99	4.11	+0.53	2.21	-1.27	2.93	-0.74	45.08	-2.05
ew Milford	2.63	......	3.87	......	3.47	......	6.34	......	3.82	......	1.76	......	0.83	......	2.32	......	3.91	......	3.50	......	2.32	......	2.93	......	37.70	......
aterson	4.12	+0.27	4.82	+0.61	3.53	-0.85	6.75	+3.19	4.38	-0.06	2.26	-1.86	0.51	-4.51	2.56	-2.17	4.01	-0.12	4.62	+0.53	2.72	-0.45	3.40	-0.66	43.68	-6.08
ainfield	3.22	-0.80	3.57	-0.39	3.55	-0.72	5.67	+1.77	4.49	+0.57	2.11	-1.63	1.63	-4.20	4.86	-0.35	6.90	+2.53	4.71	+0.56	2.82	-0.55	3.67	-0.39	47.20	-3.60
dgefield	3.46	......	4.61	......	3.84	......	6.22	......	3.96	......	2.39	......	1.92	......	1.64	......	3.30	......	4.08	......	2.28	......	3.24	......	40.94	......
omerville	3.41	-0.31	3.87	+0.09	3.40	-0.56	6.31	+2.82	3.05	-0.80	2.41	-1.33	2.58	-2.53	2.58	-2.26	7.61	+3.96	3.82	+0.38	2.59	-0.45	......	......	......	......
uth Orange	3.26	-0.77	3.41	-0.52	3.07	-0.79	6.77	+3.20	5.58	+2.02	2.05	-1.50	1.79	-3.22	3.67	-1.41	4.54	+0.73	5.35	+1.51	2.82	-0.48	2.68	-1.24	44.99	-2.47
erona	4.16	......	4.73	......	3.97	......	8.04	......	4.07	......	3.12	......	.074	......	2.56	......	4.42	......	5.34	......	2.95	......	3.59	......	47.69	......
oodcliffe Lake	3.84	......	4.27	......	3.77	......	7.49	......	3.42	......	2.68	......	0.61	......	3.00	......	5.29	......	4.76	....	2.28	......	4.34	......	45.75	......
w York, N. Y.	2.67	-0.99	4.30	+0.48	3.51	-0.13	5.76	+2.53	3.64	+0.40	2.30	-1.03	0.98	-3.26	1.45	-2.88	4.05	+0.66	5.16	+1.63	2.08	-0.88	3.23	-0.39	39.13	-3.86
he Southern Interior.																										
lleplain	2.96	-0.57	......	......	......	......	6.04	+2.39	2.69	-1.13	2.64	-0.58	0.62	-3.49	1.51	-2.79	2.42	-0.97	3.90	+0.84	2.29	-0.32	2.45	-1.50	......	......
idgeton	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
rlington	3.12	-0.28	3.94	+0.44	2.34	-1.37	6.22	+2.52	2.31	-1.90	2.53	-1.35	1.35	-3.39	4.00	-1.45	7.51	+4.00	4.73	+1.08	3.29	+0.18	3.59	-0.73	44.93	-2.25
ayton	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
ghtstown	2.95	-0.32	3.39	-0.21	1.92	-2.12	6.66	+2.75	3.70	-0.25	3.86	+0.26	1.47	-3.52	1.27	-3.31	8.24	+5.11	4.03	+0.32	2.35	-0.96	2.69	-1.00	42.53	-3.25
dian Mills	4.19	+0.37	5.00	+1.55	4.01	-0.02	6.02	+2.59	1.83	-1.41	3.91	-0.22	1.44	-3.22	3.97	-1.96	4.72	+0.81	5.28	+1.84	2.99	-0.09	2.39	-2.01	45.75	-1.77
kewood	4.25	+0.57	4.96	+1.39	3.25	-0.73	8.74	+5.07	2.83	-0.57	4.32	+0.61	2.38	-2.47	2.82	-3.23	4.61	+1.82	5.20	+1.61	3.48	+1.02	2.59	-2.05	49.43	+3.04
orestown	2.92	-0.54	3.75	+0.27	2.51	-1.25	5.84	+2.55	2.50	-1.52	2.37	-1.35	......	......	......	......	......	......	......	......	......	......	......	......	......	......
orestown No. 2	2.81	......	3.87	......	2.47	......	5.79	......	2.42	......	2.41	......	2.09	-2.59	2.35	-2.54	6.86	+3.23	4.19	+0.62	3.21	-0.04	3.79	+0.10	42.26	......
rthfield	3.61	+0.08	4.14	+1.35	2.92	-0.57	5.92	+2.46	1.84	-1.63	2.90	-0.77	1.19	-2.41	2.06	-2.29	2.60	+0.10	4.93	+2.15	2.83	+0.45	2.30	-1.82	37.24	-2.90
easantville	3.97	+0.81	4.33	+1.52	2.93	-0.54	6.14	+2.79	3.86	+0.60	2.67	-1.26	1.14	-2.84	2.28	-2.65	3.06	-0.06	4.65	+1.21	3.09	+0.37	2.43	-1.81	40.55	-1.86
nyon	3.74	......	5.17	......	2.40	......	7.80	......	4.55	......	3.92	......	2.78	......	1.72	......	4.37	......	5.19	......	2.65	......	3.30	......	47.59	......
enton	3.06	-0.25	3.51	+0.24	2.34	-1.06	5.34	+2.40	3.53	+0.45	3.53	+0.44	0.63	-3.31	2.64	-2.11	7.14	+3.74	3.51	+0.73	2.24	-0.49	3.08	-0.27	40.55	+0.51
enton No. 2	3.14	......	3.61	.....	2.60	......	5.95	....	3.18	......	3.41	......	0.63	......	3.34	......	6.72	......	4.44	......	2.35	......	3.27	......	42.64	......
ckerton	3.99	+0.36	3.89	+0.23	3.10	-1.15	6.72	+2.98	2.75	-0.99	3.33	-0.50	0.78	-3.10	3.22	-2.32	2.77	-0.29	4.53	+1.00	3.64	+0.56	2.70	-1.81	41.42	-5.03
neland	....	....	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
iladelphia, Pa.	2.70	-0.60	4.24	+0.92	2.22	-1.17	6.44	+3.39	2.28	-0.98	2.74	-0.50	1.53	-2.62	3.22	-1.40	6.51	+3.37	3.59	+0.78	3.11	+0.41	2.98	-0.45	41.56	+1.15
The Sea Coast.																										
bury Park	3.06	-0.51	3.50	0.00	3.88	-0.35	5.30	+1.61	2.92	-0.66	3.70	+0.08	2.22	-2.32	1.27	-3.79	4.31	+1.32	3.75	+0.04	2.09	-0.83	1.00	-2.85	37.00	-8.26
lantic City	3.02	-0.47	4.33	+0.97	3.25	-0.35	5.63	+2.64	1.90	-1.15	2.02	-1.02	1.20	-2.73	2.42	-2.07	2.12	-0.53	4.30	+1.10	3.19	+0.37	2.67	-1.27	36.05	-4.51
pe May City	1.92	-1.45	4.76	+1.47	3.14	-0.59	4.63	+1.74	1.26	-1.73	1.41	-1.63	1.86	-1.92	1.86	-2.40	2.19	-0.81	2.62	-0.68	2.48	-0.74	1.68	-2.06	29.81	-10.80
ng Branch	4.67	+0.49	4.11	+0.20	3.22	-1.12	7.84	+3.29	4.11	+0.35	2.87	-0.93	2.07	-2.85	0.94	-5.19	3.04	-0.02	5.92	+1.87	3.46	-0.06	3.26	-1.48	45.51	-5.45
ndy Hook	3.80	-0.16	3.72	-0.03	2.38	-1.66	5.08	+1.46	4.86	+1.14	2.34	-1.44	1.90	-3.22	0.88	-4.10	4.89	+1.46	4.72	+0.94	2.08	-1.17	3.19	-0.85	39.84	-7.63

Monthly and Annual Mean Temperatures for the Year 1929, with Departures from the Normal

STATIONS.	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	28.8	+1.5	30.3	+3.2	44.2	+6.1	51.4	+1.6	60.4	−0.3	^{b}70.0	+1.2	73.6	+0.4	70.7	−0.3	67.4	+2.7	51.6	−2.2	42.8	+1.7	30.2	−0.4	51.8	+1.3
Charlotteburg	28.2	+1.3	29.2	+3.6	42.6	+6.8	49.2	+2.4	58.2	+0.7	66.6	+1.8	70.6	+0.6	66.8	−1.1	64.3	+2.4	49.6	−2.0	41.2	+1.1	30.4	+0.6	49.7	+1.5
Dover	^{a}28.3	+1.7	^{a}29.1	+2.9	^{a}43.0	+7.8	48.6	+1.2	58.8	+0.2	67.8	+1.1	71.6	+0.2	68.4	−0.7	64.6	+2.4	49.3	−2.0	41.4	+1.3	^{b}30.2	+0.3	50.1	+1.4
Layton	25.9	+1.2	26.7	+3.1	40.4	+4.8	49.1	+1.9	56.8	−1.2	66.8	+1.3	70.8	−0.1	65.9	−2.5	64.2	+1.9	49.1	−2.4	40.2	+1.4	28.8	+1.4	48.7	+0.9
Long Valley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newton	27.6	+1.9	^{a}28.4	+1.9	43.3	+7.8	50.0	+2.0	60.2	+0.7	69.8	+1.8	73.2	+0.7	^{a}69.5	−0.9	^{a}64.5	+1.0	50.6	−1.9	41.6	+1.1	30.0	−0.1	50.7	+1.3
Phillipsburg	29.8	+1.7	29.4	+1.5	43.6	+5.5	51.4	+1.5	60.2	−1.1	69.6	+0.3	72.7	−1.4	69.6	−2.2	66.6	+1.4	51.4	−2.5	43.0	+1.8	31.4	+0.1	51.6	+0.6
Sussex	^{a}27.2	+0.6	27.8	+2.4	^{b}42.4	+6.1	^{b}49.4	+0.8	^{a}58.1	−1.8	^{b}68.3	+1.5	^{m}71.0	−1.1	^{i}68.9	−0.6	^{b}65.5	+1.3	^{b}48.6	−4.6	41.3	+0.2	29.4	−0.5	49.8	+0.4
The Red Sandstone Plain.																										
Bayonne	^{a}31.9	+1.2	32.8	+3.4	^{c}43.4	+3.9	49.6	+0.1	61.9	+1.6	69.6	+1.2	72.2	−1.8	69.3	−2.9	.....	..	.....	.....	47.0	+3.3	37.0	+4.0	.....	.....
Boonton	28.8	+1.5	28.2	+1.1	41.4	+4.8	49.0	+0.3	57.6	−1.6	67.8	+0.2	70.7	−1.8	67.2	−4.1	64.6	+1.0	49.2	−3.6	41.3	−0.1	30.4	−0.1	49.7	−0.2
Elizabeth	^{b}31.3	+1.1	33.2	+2.7	45.4	+6.6	52.0	+1.2	61.0	−1.0	^{a}70.6	+0.1	^{b}75.8	+0.5	71.2	−2.2	68.2	+1.5	52.3	−3.1	^{b}45.0	+1.5	^{a}33.1	−0.2	53.3	+0.7
Flemington	30.5	+0.7	31.7	+2.9	45.2	+5.1	52.0	+1.6	60.6	−0.7	70.4	+1.2	73.9	−0.7	70.8	−1.7	67.8	+1.5	52.9	−3.1	44.6	+1.7	32.4	+0.4	52.7	+0.7
Jersey City	32.1	−0.1	33.5	+2.9	45.7	+6.5	51.3	+1.3	61.6	0.0	71.3	+0.4	75.4	−0.7	72.1	−2.0	69.3	+2.1	54.4	−1.9	46.0	+2.0	35.8	+1.7	54.0	+1.0
Lambertville	29.0	−1.5	30.4	0.0	44.6	+5.2	51.1	+0.4	^{c}59.8	−1.8	70.0	+0.3	73.0	−1.3	70.2	−2.2	66.9	+1.1	51.6	−3.0	43.0	−0.2	32.2	−1.4	51.8	−0.4
Little Falls	30.3	+2.3	30.2	+0.6	43.2	+5.2	49.9	0.0	58.9	−0.8	68.6	+0.6	73.1	−0.7	69.7	−3.5	67.2	+3.1	52.0	−2.9	43.5	+1.3	31.6	+0.1	51.5	+0.4
New Brunswick	31.4	+1.2	32.0	+1.2	45.7	+6.9	51.6	+2.0	61.1	+0.7	70.7	+1.6	73.7	−0.3	70.8	−1.3	68.0	+2.4	53.4	−1.8	45.0	+1.6	33.4	+0.2	53.1	+1.2
Paterson	32.2	+2.6	32.5	+2.3	46.4	+7.6	51.6	+1.1	62.1	+0.6	71.8	+2.0	75.7	+1.3	71.4	−0.8	68.6	+2.4	53.2	−2.0	^{a}45.3	+1.8	33.4	+0.3	53.7	+1.6
Plainfield	30.4	+0.4	31.0	+2.3	44.1	+5.3	49.8	+0.2	59.7	−0.5	69.4	+0.8	72.6	−1.4	68.6	−3.2	66.6	+1.0	51.6	−2.6	44.0	+1.5	33.2	+0.5	51.8	+0.4
Ridgefield	29.6	.....	30.7	.....	44.6	.....	49.6	.....	60.2	.....	69.1	.....	73.2	.....	70.4	.....	67.0	.....	51.8	.....	43.7	.....	31.8	.....	51.8	.....
Somerville	^{a}30.1	+1.3	31.4	+2.5	44.9	+6.7	51.0	+1.5	^{a}59.5	−1.3	69.4	+0.3	72.6	−1.5	^{c}69.8	−2.6	^{b}66.8	+0.8	51.8	−2.5	^{a}44.5	+2.1	.....	.....	.....	.....
South Orange	30.3	−1.4	32.5	+3.5	45.3	+8.2	51.4	+2.9	61.2	+1.2	^{b}70.4	+1.9	^{b}73.2	0.0	^{b}69.8	−1.1	67.2	+3.1	51.7	−1.7	43.8	+2.0	32.3	+0.2	52.4	+1.6
Verona	28.5	.....	29.7	.....	42.8	.....	48.8	.....	58.8	.....	67.6	.....	71.6	.....	68.8	.....	65.7	.....	51.2	.....	42.8	.....	32.2	.....	50.7	.....
New York, N. Y.	32.1	+1.2	33.4	+2.1	44.8	+7.1	50.6	+1.2	60.6	0.0	70.0	+1.2	74.1	+0.3	71.2	−1.9	68.8	+2.0	54.0	−2.3	46.0	+1.8	36.1	+1.1	53.5	+1.2
The Southern Interior.																										
Belleplain	^{i}32.6	−0.4	.....	.....	.....	.....	.....	.....	^{b}60.3	−0.8	^{a}70.0	+1.3	73.2	−0.6	70.5	−2.1	^{a}67.2	+0.7	53.4	−2.9	45.4	+0.9	^{d}35.6	+0.5	.....	.....
Bridgeton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Burlington	32.8	+0.5	33.4	+2.1	48.0	+7.6	54.2	+2.4	62.6	+0.7	72.1	+2.4	75.1	+0.1	71.6	−2.6	68.7	+1.9	54.4	−3.8	46.6	+2.2	35.4	+1.6	54.6	+1.3
Clayton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hightstown	31.0	+1.1	31.9	+2.5	46.0	+5.6	51.2	+0.7	59.9	−1.4	70.2	+1.2	73.2	−1.2	70.0	−2.3	67.4	+0.6	52.3	−2.9	45.2	+1.9	33.7	+1.1	52.7	+0.6
Indian Mills	32.7	+0.8	33.4	+1.6	47.9	+7.4	53.8	+3.5	61.6	−0.5	70.2	+0.4	73.8	−0.9	70.3	−2.3	68.1	+2.0	53.0	−2.5	45.4	+2.5	36.2	+2.4	53.9	+1.2
Lakewood	32.1	+0.8	32.3	+2.6	46.0	+6.4	52.0	+2.6	61.0	+0.8	70.0	+2.5	72.6	−0.2	69.5	−1.6	66.4	+1.8	52.0	−3.1	45.1	+2.3	35.2	+1.7	52.8	+1.4
Moorestown	^{a}32.1	+1.4	33.0	+1.7	47.6	+8.4	53.2	+2.8	60.8	−0.5	70.6	+0.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moorestown No. 2	30.5	.....	31.8	.....	46.8	.....	52.7	.....	60.9	.....	70.4	.....	74.0	−0.7	70.8	−1.8	67.6	+1.6	52.6	−2.1	44.6	+1.4	34.6	+1.1	53.1	.....
Pleasantville	^{a}31.5		32.2	.....	46.7	.....	52.6	.....	58.0	.....	69.0	.....	71.5	.....	68.8	.....	66.2	.....	52.8	.....	46.2	.....	36.6	.....	52.7	.....
Runyon	30.2	.....	.....	.....	44.6	.....	51.2	.....	59.2	.....	66.2	.....	70.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trenton	31.7	+1.2	33.0	+2.3	46.0	+6.9	52.2	+2.4	61.6	+0.5	70.8	+1.3	74.6	+0.1	70.8	−2.2	67.8	+0.9	53.2	−2.4	45.3	+0.9	35.0	+0.6	53.5	+1.0
Tuckerton	33.7	+1.1	34.7	+3.9	47.5	+7.5	52.6	+3.3	60.2	+0.3	70.5	+2.1	73.9	−0.2	70.2	−2.5	67.8	+1.6	54.5	−1.6	46.6	+2.5	37.2	+2.8	54.1	+1.7
Vineland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Philadelphia, Pa.	34.2	+1.6	35.2	+1.3	48.4	+7.6	55.2	+3.1	62.8	−0.1	72.8	+1.4	76.8	+0.6	73.2	−1.6	70.3	+2.3	55.8	−2.0	47.4	+1.7	38.2	+1.9	55.9	+1.5
The Sea Coast.																										
Asbury Park	33.0	+0.8	33.6	+2.2	44.8	+5.8	50.6	+2.1	58.8	0.0	69.0	+1.6	72.4	0.0	68.2	−3.6	67.1	+0.3	54.5	−1.3	46.4	+1.6	36.9	+1.9	52.9	+1.0
Atlantic City	34.8	+2.3	35.0	+1.4	45.9	+7.3	52.4	+4.6	58.0	−0.1	68.3	+1.7	72.2	+0.1	71.2	−1.3	67.6	+0.8	55.7	−1.2	47.4	+1.8	39.2	+2.8	54.0	+1.7
Cape May City	35.1	+1.0	35.3	+1.2	46.6	+5.8	53.0	+4.6	58.8	+0.2	68.8	+1.1	72.6	−0.8	71.4	−2.0	67.2	−1.8	56.0	−3.6	48.2	+0.8	39.5	+1.5	54.4	+0.7
Long Branch	29.5	−2.1	32.1	+1.7	45.2	+6.7	49.8	+1.7	58.4	+0.2	70.0	+3.8	71.9	−0.2	68.4	−2.6	67.4	+1.5	51.3	−5.0	47.0	+2.8	36.0	+1.9	52.2	+0.9
Sandy Hook	31.7	+0.9	32.4	+1.8	43.5	+6.5	49.4	+2.4	59.6	+1.1	69.6	+1.8	73.3	−0.4	71.2	−1.6	68.1	+1.0	54.2	−2.8	45.8	+1.2	35.0	+0.6	52.8	+1.0

Reference letters, as a, b, c., in table indicate number of days missing; for example, b represents 2 days.

THE WEATHER BY MONTHS.

January averaged slightly above the normal in temperature while the precipitation was practically normal. The only cold weather of consequence was from the 14th to 16th, inclusive. Very few Januaries have had as little snow. February was warmer than usual and the precipitation about normal. There were no well-defined cold waves and the snowfall averaged 9.2 inches, a little more than usual. March was very warm being the fourth warmest in a 45-year record. Precipitation was deficient and the snowfall negligible. April set a new record for rainfall. The average, 6.43 inches, is the greatest in 45 years. An unusual number of destructive wind storms occurred. May was the first month of the year to average cooler than normal. Freezing temperatures were experienced on various dates, except along the coast. June was normal in most respects, while July was very dry, the second driest on record. The drought continued thru August but relatively cool weather prevailed. In September a period of showers from the 5th to the 18th marked the termination of the dry weather. October was cool with the first general freeze on the 10th and 11th. The precipitation was decidedly above normal but there was no appreciable amount of snow. November was up to the normal in precipitation but a very small part of it was snow. In temperature it averaged above normal, but there were unusual extremes in both directions. December was uneventful, except for moderately heavy snows in the extreme north portion.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXV. January, 1930. No. 1

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to he Superintendent of Documents, Government Printing Office, Washington, D. C. It s furnished without charge to the cooperative observers whose work appcars herein.

GENERAL SUMMARY.

The month averaged warmer than usual with the mean 1.9 degrees above normal. All sections of the State experienced bout the same departure, with the first half of the month warm nd the second half cold. The highest temperatures were recorded on the 8th and 9th and the lowest on somewhat scattered lates, but mostly the 19th and 20th. On these latter dates temperatures were above the zero mark over the State, except in the Highland were they were well below it.

Precipitation was about 80% of the normal, about the same elatively amount as for the preceding month of December. The irst decade was dry with the monthly precipitation rather well listributed thru the other two. The heaviest amounts occurred enerally on the 14th and 18th. The snowfall averaged about ix inches, the normal amount being about eight inches. The eaviest single snowfall occurred in the northwest section on he 18th and in the southern half of the State on the 30th with mounts ranging mostly between two and six inches.

Cloudy weather continued abnormally prevalent from the preeding month. The number of cloudy days was fifteen, which quals the record that was established in 1910 and 1923.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 35 stations, was 31.7°, which was 1.9° above ormal. The highest temperature was 72° at Belleplain on the th, and the lowest, —14° at Layton on the 20th. The greatst daily range of temperature was 38° at five stations on either he 7th, 10th or 20th. The highest monthly temperature was 6.5° at Cape May City, and the lowest, 24.8° at Layton.

The temperature departure from the normal for the year, 1930, o date, by sections, is: The Highlands, +1.3°; Red Sandstone lain, +1.7°; Southern Interior, +2.4°; Sea Coast, +2.3°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 2.92 inches, which was 0.67 inch elow normal. The average total snowfall at 20 selected stations was 5.9 inches. The greatest monthly precipitation was .03 inches at Pleasantville, and the least, 1.80 inches at Culvers ake. The greatest amount of precipitation in any 24 consecuve hours was 1.82 inches at Northfield on the 14th. The mean f the number of days on which 0.01 inch or more of precipitaon fell was 10, or the normal number.

The precipitation accumulated departure from the normal for e year 1930, to date, by sections, is: The Highlands. —1.09 ches; Red Sandstone Plain, —1.05 inches; Southern Interior, -0.09 inch; Sea Coast, —0.26 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 11 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 48 miles per hour from the northeast at Atlantic City on the 30th.

MISCELLANEOUS.

The per cent of possible sunshine was 42, or 8 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.24 inches, which was 0.13 inch above normal. The highest reading was 30.82 inches on the 5th at Long Branch, and the lowest was 29.71 inches on the 18th at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 5.3 feet, and the highest stage was 7.0 feet on the 15th. The mean stage at Trenton was 2.5 feet, or 1.0 foot below normal. The mean was mean was determined from readings on the first twenty days, the river being frozen around the gage on and after the 21st. Ice was jamed in the river without any drift from the 25th to the 28th, inclusive.

Several stations reported thunderstorms on the 14th. Dense fog was noted on the following dates: 1, 2, 3, 7, 9, 10, 12, 13, 14, 15, 21 and 28. Sleet and, in some cases, light hail fell on the 10th, 11th, 12th, 13th, 21st, 22d and 27th.

COMPARATIVE DATA FOR JANUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	30.8	67	0	4.08	5.41	3.33	......				
1886	27.3	60	−10	4.47	5.59	3.08	......	......	......	......	......
1887	28.4	67	−6	3.86	6.65	2.00	......	......	......	......	......
1888	25.4	59	−12	4.77	6.74	2.80	......	......	......	12	10
1889	36.2	60	8	5.68	8.78	3.84	......	......	......	12	9
1890	**41.3**	**78**	**12**	2.29	3.22	1.05	......	......	......	9	9
1891	34.2	59	10	**6.57**	**10.55**	4.41	......	......	......	11	10
1892	29.9	67	−6	5.13	7.05	2.50	......	10	11	10	10
1893	21.6	*54*	−21	3.04	4.56	1.87	......	10	9	12	10
1894	34.2	61	−4	2.34	3.80	1.18	......	10	10	11	9
1895	28.1	64	−4	4.66	5.80	2.48	9.7	10	8	13	11
1896	28.6	61	−7	1.66	*2.81*	*0.68*	......	10	10	11	11
1897	29.0	64	−6	2.80	4.21	1.70	11.5	12	10	9	5
1898	32.6	64	−10	4.20	5.90	2.79	9.7	11	8	12	9
1899	30.1	60	−21	4.01	5.73	2.40	6.0	9	11	11	11
1900	32.4	64	−5	3.85	5.50	2.37	2.6	13	8	10	11
1901	30.4	63	−6	2.52	4.00	1.35	5.4	11	11	9	10
1902	28.4	58	−5	3.28	4.35	2.52	8.6	11	11	9	9
1903	30.4	57	−5	3.90	5.04	2.31	6.4	12	9	10	10
1904	23.3	58	−*34*	3.09	4.67	1.34	15.6	10	10	11	10
1905	27.0	60	−16	4.18	7.13	2.68	21.3	13	7	11	10
1906	36.5	74	−5	2.85	3.86	2.08	3.1	12	9	10	9
1907	31.8	71	−19	3.50	5.80	1.93	10.3	11	9	11	11
1908	31.8	60	−6	3.74	5.22	2.29	9.9	8	9	14	14
1909	33.2	69	−12	3.18	4.13	2.18	7.5	12	11	8	9
1910	29.7	*54*	−15	5.04	6.65	3.66	13.3	8	9	14	12
1911	33.5	63	0	3.44	5.34	1.97	3.6	8	8	15	15
1912	22.3	58	−32	2.82	4.62	1.73	13.4	10	7	14	14
1913	35.9	68	10	3.58	4.71	2.63	*0.8*	8	12	11	13
1914	31.9	73	−12	3.85	6.15	1.95	2.4	11	7	13	14
1915	33.5	61	3	6.55	8.92	4.40	3.4	9	8	14	9
1916	35.1	74	−2	*1.50*	2.96	0.92	1.9	11	6	14	12
1917	31.4	58	0	3.26	4.52	2.35	5.4	11	8	12	11
1918	*20.3*	56	−16	4.14	6.14	2.78	18.9	10	8	13	13
1919	34.1	62	−7	3.51	4.44	2.24	1.3	12	8	11	11
1920	23.6	53	−10	2.60	3.53	1.61	6.6	14	7	10	8
1921	33.0	63	−5	2.63	3.49	1.78	2.7	11	7	13	11
1922	27.6	57	−11	2.62	4.13	1.08	11.1	13	8	10	9
1923	30.1	66	−14	5.22	7.26	3.41	16.6	15	6	10	8
1924	32.2	65	−6	4.48	5.69	2.88	1.4	9	7	15	12
1925	27.4	59	−20	4.43	8.73	2.54	**22.8**	15	8	8	8
1926	30.8	63	−9	2.61	4.04	1.63	2.4	12	6	13	10
1927	29.2	70	−12	2.22	3 32	1.19	7.9	11	8	12	9
1928	32.5	65	−15	2.26	3.97	1.37	8.3	11	7	13	11
1929	30.7	67	−4	3.49	5.03	1.92	1.6	15	8	8	8
1930	31.7	72	−14	2.92	4.03	1.80	5.9	13	7	11	10

W. B. O.Philadelphia-2-21-30-1050.

Climatological Data for January, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	28.4	+1.1	60	8	−3	20	31	2.82	−0.72	0.85	9.8	10	15	3	13	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	28.6	+1.7	61	9	0	31	34	3.31	−0.24	1.35	6.0	11	6	6	19	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	......	......	......	−5	20	....	1.80	−1.38	0.50	10.0	12	12	4	15	e.	Brice E. Riker.
Dover	Morris	600	46	28.8^{b}	+2.2	66^{t}	9	2	19	38^{h}	3.17	−1.22	1.14	8.0	9	7	13	11	......	William C. Harris
Layton	Sussex	480	29	24.8	+0.1	58	8	−14	20	38	2.07	−0.82	0.81	11.5	10	8	2	21	sw.	A. M. Depue.
Long Valley	Morris	520	....	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	46	28.0	+2.3	60	8	−1	26	35	2.14	−1.47	0.76	6.1	8	8	6	17	ne.	Irving J. Kern.
Phillipsburg	Warren	363	47	29.6	+1.5	64	9	0	20	31	2.30	−1.30	1.04	8.5	6	10	10	11	......	Town Engineer.
Sussex	Sussex	442	35	27.1^{a}	+0.5	60^{a}	8	−6^{a}	20	34^{a}	1.91	−1.57	0.42	6.6	9	12	5	14	w.	A. J. W. Mowatt
Means and extremes	......	......	....	27.9	+1.3	66	9	−14	20	38	2.44	−1.09	1.35	8.3	9	10	6	15	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	......	......	......	......	11	24	....	......	......	......	......	9	14	7	10	w.	William Mann.
Boonton	Morris	400	§40	28.0	+0.7	65	9	4	20	37	2.49	−1.34	0.87	......	10	9	4	18	ne.	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	....	3.64	−0.05	0.81	5.0	12	11	8	12	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	32.6	+2.4	69	9	2	25	36	2.64	−1.40	0.95	3.4	12	13	5	13	sw.	Union County Park Com.
Flemington	Hunterdon	140	§44	30.3	+0.5	67	9	4	19	34	2.72	−0.97	0.97	7.5	10	15	2	14	w.	Hiram E. Deats.
Jersey City	Hudson	10	32	33.8	+1.6	66	9	10	19	27	2.65	−0.85	0.95	4.4	9	7	7	17	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	43	30.1	......	66	7	3	19	38	2.72	−0.93	1.09	7.6	12	16	4	11	e.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	30.0	+2.0	65	8	8	19†	33	2.88	−0.82	0.93	6.8	11	9	12	10	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	31.8	+1.6	68	9	6	31	33	2.65	−1.14	0.95	2.3	9	11	6	14	w.	N. J. Experiment Station
New Milford‡‡	Bergen	9	13	......	......	......	......	......	......	....	2.43	......	0.75	......	7	....	....	....	....	Hackensack Water Co
Paterson	Passaic	80	59	32.3	+2.7	64	8	9	20	26	2.95	−0.90	1.00	7.0	10	13	3	15	nw.	Marion T. Probert.
Plainfield	Union	120	42	31.3	+1.3	67	9	6	19	33	2.69	−1.33	0.89	6.1	10	7	9	15	sw.	E. D. Pearson.
Ridgefield	Bergen	80	13	30.0	......	64	8	9	19†	27	2.46	......	0.68	6.0	9	7	8	16	nw.	George P. Kirsten.
Somerville	Somerset	70	47	30.4	+1.6	66	9	5	24	32	2.55	−1.17	1.09	3.9	9	10	7	14	nw.	Julius Gerlich.
South Orange	Essex	200	58	31.4	+2.5	67	9	7	19†	32	2.31	+1.72	0.90	......	9	5	8	18	w.	Everett W. Bird.
Verona	Essex	490	4	29.4	......	63	8	6	19	28	2.80	......	0.97	5.9	9	8	9	14	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	3.10	......	1.03	......	9	....	....	....	......	Hackensack Water Co.
New York, N.Y	......	365	60	33.6	+2.7	65	9	10	19	29	2.58	−1.08	0.89	T4.1	9	3	6	22	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	30.9	+1.7	69	9	2	25	38	2.67	−1.05	1.09	5.5	10	10	7	14	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	35.1^{a}	+2.1	72^{a}	9	0^{a}	31	36^{a}	3.82	+0.29	0.77	8.0	10	6	7	18	sw.	A. F. Waldron.
Burlington	Burlington	12	§44	34.4	+2.1	70	9	9	19†	34	3.10	−0.30	1.02	3.7	10	13	2	16	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	36	32.5	+2.6	69	9	5	31	38	3.04	−0.23	1.04	4.5	10	13	2	16	nw.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	34.6	+2.7	71	9	2	24	34	3.64	−0.18	1.00	7.8	11	10	5	16	nw.	James M. Armstrong.
Lakewood	Ocean	54	26	34.1	+2.8	69	9	6	31	32	3.32	−0.36	0.95	6.0	11	12	4	15	sw.	R. W. Holman.
Moorestown	Burlington	......	67	32.0	+1.3	68	9	8	19†	38	3.03	−0.43	0.94	5.2	10	9	7	15	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	......	......	...	......	......	....	4.00	+0.47	1.82	7.8	10	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	34.2	......	70	9	5	31	33	2.81	......	0.98	4.8	12	12	4	15	s.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	34.8^{a}	......	65^{a}	10	8	31	33^{a}	4.03	+0.87	1.66	......	14	16	1	14	nw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	......	......	......	......	......	......	....	2.77	......	0.86	......	9	11	8	12	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	33.0	+2.5	67	9	8	19	29	2.73	−0.58	1.00	3.1	9	8	5	18	nw	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	5	......	......	......	......	......	......	....	3.00	......	1.06	4.1	13	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	35.6	+3.0	63	9†	8	19	37	3.17	−0.46	0.88	4.0	13	13	1	17	nw.	John H. Brown.
Philadelphia, Pa	......	117	59	35.6	+3.0	69	9	11	19	34	3.15	−0.15	1.08	3.9	9	8	2	21	nw.	U. S. Weather Bureau.
Means and extremes	......	......	.	34.0	+2.4	72	9	0	31	38	3.23	−0.09	1.82	5.4	11	11	4	16	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	33.8	+1.6	63	2	11	19	33	3.76	+0.19	1.18	4.5	7	18	1	12	nw.	Information Bureau.
Atlantic City	Atlantic	16	57	36.4	+3.9	63	10	11	19	35	3.75	+0.26	1.46	7.0	13	8	8	15	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	36.5	+2.4	61	2	15	19	35	3.50	+0.13	1.16	8.9	11	7	9	15	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	32.8	+1.2	63	2	9	19	25	3.45	−0.73	0.60	5.8	13	5	11	15	nw.	William D. Martin.
Sandy Hook	Monmouth	22	32	33.0	+2.2	59	9	11	19	23	2.81	−1.15	1.05	2.4	11	7	5	19	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	34.5	+2.3	63	2†	9	19	35	3.45	−0.26	1.46	5.7	11	9	7	15	nw.	
For the State	......	......	....	31.7	+1.9	72	9	−14	20	38	2.92	−0.67	1.82	5.9	10	10	6	15	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for January, 1930

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.05							.16		T.		.55	.02	.85	.05	T.		.80				.08					.06	.20				2.82
Charlotteburg	Passaic	.03		.11									.49	.03	1.35	.07	T.		.89			.02	.10					.07	.15				3.31
Culvers Lake	Delaware	.04	.01	.02				.01	T.		T		.50	.04	.39	.05	T.		.50			T.	.01				T.	.01	.22				1.80
Dover	Passaic	.03		.15									.41		.88	.06			1.14			.10	.10					.30			T		3.17
Layton	Delaware	.08							T.	.01			.41	.17	.39	.02			.81				.08					.03	.07				2.07
Long Valley																																	.....
Newton	Delaware	T.											.36	.05	.68		T.		.76			.05	.05					.08	.11				2.14
Phillipsburg	...do	T.		.09					T.		T.	T.	.31		1.04	T.	T.		.46			T.	.06				T.	.34	T				2.30
Sussex	Hudson	.04		.17							T.		.27	.24	.39	.03			.42				.18					.17					1.91
The Red Sandstone Plain.																																	
Bayonne	Coast																																.....
Boonton ||||	Passaic		T.	.19								T.	.14	.18	.01	.87		T	.02	.84		T.	.04	.03					.17			T.	2.49
Chatham ||	...do		T	.32	.29				T.				.09	.44	T.	.76	.04		.17	.81		T.	.12	.24					.34			.02	3.64
Elizabeth	Coast			.15							T.		.40	.01	.60	.06			.95			.02	.09					.11	.21		.03	.01	2.64
Flemington	Raritan	T.		.17							T.		.28	.03	.81	.04	T.		.97			.02	.09					.14	.17		T.		2.72
Jersey City	Coast			.21							T.	T.	.35		.61	.02	T.		.95			T.	.09	T.				.24	.08		.10		2.65
Lambertville	Delaware			.09									.25		.57	.06	.03	.01	1.09			.02	.08	T.				.44	.06		.02		2.72
Little Falls. ||||	Passaic			.15									.23	.18		.93			.39	.61		.02	.04	.05			T.		.27			.01	2.88
New Brunswick	Raritan			.14							T.	T.	.22	T.	.80	.06	T.		.95			T.	.09	T.				.13	.24		.02	T.	2.65
New Milford.**	Hackensack			.13									.45		.75	.02			.72					.08						.28			2.43
Paterson	Passaic			.14							T.		.40		1.00	.01	T.		1.00			.05	.05				T.	.05	.20		.05		2.95
Plainfield	Raritan	T.		.20							T.	T.	.41		.69	.04	T		.89			.01	.08	T.				.30	.03		.04		2.69
Ridgefield**	Hackensack	.02		.16							T.	T.	.38			.65	T.		.68			T.	.05					.10	.16		.26		2.46
Somerville	Raritan			.10							T.		.26		.62	.05	T.		1.09			T	.08					.16	.17		.02	T.	2.55
South Orange	Rahway	T.											.39		.55	.04	T.		.90			.02	.11					.07	.22		.01	T.	2.31
Verona**	Passaic	T.		.13								T.	.44		.74	.03	T.		.97			.05	.08					.31	T.		.05		2.80
Woodcliff Lake**	Hackensack	.12		.18									.55		1.03				.80			.07	.05					.30					3.10
New York, N. Y***	Coast			.20							T.	T.	.37		.58	.02	T.		.89			.01	.09	T.				.32	T.		.10		2.58
The Southern Interior.																																	
Belleplain	Tuckahoe			.35								T	T.	.40	.70	.03	T.		.75			.32	.06	T.				.39	.05		.77	T.	3.82
Burlington	Delaware			.22								T.	.22	T.	.82	.06	.02		1.02			T.	.08					.08	.45		.13		3.10
Clayton	Delaware																																......
Hightstown	Raritan			.18							T.		.23		.68	.10	.04		1.04			T.	.14					.27	.22		.14		3.04
ndian Mills	Mullica			.42								T.	.18	.04	.76	.08	.04		1.00			.25	.24					.18			.45		3.64
akewood	Metedeconk			.30							T.	T.	.18		.72	.05	.07		.95			.20	.16					.25	.18		.26		3.32
Moorestown ||||	Delaware	T.		.25									.18	.01	.02	.94	T.	T.	.88			T.	.21	.03					.38			.13	3.03
Northfield	Coast			.17								T.		.03	1.82	.06	.10		.62			.31	.08					.27			.54		4.00
Pemberton				.31								T.	.14	.01	.64	.04	.03		.98			.10	.16					.13	.20		.07		2.81
Pleasantville ||||	Coast			.09	.10					.10			.05	.03	.04	1.66	.06	.02	.15	.42		.05	.27	.04				.05	.30		.40	.20	4.03
Runyon	Coast			.16									.25		.86	.10			.25				.10					*	.50		.05		2.27
Trenton***	Delaware			.17							T.	T.	.19	T.	.78	.09	T.		1.00			T.	.07	T.				.38	.02		.03		2.73
Trenton No. 2 ||||	Delaware		T.	.17	.01							T.	.16	.05	T.	.89	.07	T.	.29	.77			.03	.07				T.	.43	.01		.05	3.00
Tuckerton	Coast			.35								T.	.05	.01	.88	.05	.02	.01	.60			.35	.05						.20	.20	.40		3.17
Phila., Pa***	Delaware	T.		.16	T.						T.	T.	.18	T.	1.07	.02	T.		1.06			.01	.13					.40	T.		.12		3.15
The Sea Coast.																																	
sbury Park	Coast			.19							T.	T.	.07	T.	.68	T.	T.		1.18			T.	.10					.74	T.		.80		3.76
tlantic City***	...do			.28							T.	.01	.02	.01	1.46	.05	.08		.60			.34	.08	T.				.30		.04	.48		3.75
ape May City	...do	T.		.21								T.		.05	1.15	.16	.06		.63			.37	.12	.05				.20			.50	T.	3.50
ong Branch	...do			.60								.01	.44	.07	.46	.20	.03		.56			.16	.19					.37	.10		.26		3.45
andy Hook***	...do	T.		.20							T.	T.	.26	.01	.64	.06	T.		1 05			.06	.10					.30	.03		.10		2.81

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of oservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. || Precip- ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.25	30.80	5	29.77	18	14.9	48	ne.	30	86	80	79	44
ong Branch	30.24	30.82	5	29.73	18	......	......	......	......	82	69	76	......
oorestown	......	......	......	......	......	......	......	......	......	83	71	77	......
ew York, N. Y	30.24	30.80	11	29.73	18	13.4	46	nw.	4	73	69	68	40
hiladelphia, Pa	30.26	30.81	5	29.79	15	11.3	37	nw.	10	70	65	68	42
dgefield	30.24	30.79	11	29.72	18	......	......	......	......	......	......	......	......
andy Hook	30.24	30.81	11	29.71	18	12.9	40	nw.	18	78	72	76	38
renton	30.24	30.78	11	29.76	18	8.3	32	nw.	10	78	67	73	43
erona	30.24	30.82	5	29.75	18	6.4	30	nw.	4	79	64	68	......

Daily Temperatures for January, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	43	49	44	39	33	46	54	60	58	46	27	34	41	39	45	41	28	36	31	24	30	31	25	25	29	24	27	40	37	29	29	36.9
	Minimum	25	28	33	25	15	19	36	37	43	25	15	25	32	35	38	27	15	21	0	−3	20	22	7	1	4	4	5	25	16	18	0	19.8
Charlotteburg	Maximum	43	55	50	37	30	46	56	60	61	49	26	33	39	40	46	45	27	32	36	26	29	29	27	27	27	24	26	35	40	26	28	37.3
	Minimum	21	34	32	25	10	12	37	44	47	25	11	24	31	35	39	26	11	18	2	4	20	22	11	5	5	4	2	24	16	16	0	19.8
Dover	Maximum	38	53	45	35	31	46	55	59	66	56	....	35	45	42	47	40	28	32	15	19	29	30	25	....	28	21	28	43	36	26	29	37.3^{b}
	Minimum	29	34	32	15	11	18	39	46	43	18	15	24	32	36	40	19	12	15	2	5	19	16	8	8	13	5	5	26	17	18	5	20.2
Layton	Maximum	33	50	45	37	32	45	54	58	55	42	25	32	35	39	47	41	26	24	20	24	27	30	21	24	22	22	23	41	38	23	26	34.2
	Minimum	20	29	36	20	8	13	30	33	33	18	11	23	31	34	36	19	11	18	−3	−14	20	15	1	−1	−3	−3	1	15	16	16	−6	15.4
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	40	54	48	50	45	52	55	60	55	45	37	34	36	38	45	43	25	34	30	24	26	32	26	25	29	24	24	42	39	24	26	37.6
	Minimum	26	34	32	20	10	22	36	44	31	15	11	22	30	33	35	22	10	13	1	5	18	18	10	4	10	−1	8	22	15	14	4	18.5
Phillipsburg	Maximum	42	50	43	38	33	46	55	60	64	44	39	35	40	43	47	41	26	44	19	25	30	31	24	25	29	24	30	40	36	25	28	37.3
	Minimum	28	31	36	23	18	21	33	37	43	23	18	29	34	37	38	22	17	13	4	0	22	23	13	17	18	9	9	27	19	16	5	22.0
Sussex	Maximum	37	51	43	38	....	48	54	60	58	42	28	32	37	39	44	42	26	34	32	28	28	31	32	25	28	25	24	42	39	25	27	36.6^{a}
	Minimum	22	33	37	14	11	....	35	31	37	25	13	23	32	35	36	24	14	20	2	−6	20	18	1	−5	0	2	7	23	15	15	−5	17.6^{a}
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	40	52	47	36	32	47	54	62	65	47	32	36	43	42	48	36	29	35	21	27	30	31	27	27	29	24	29	41	29	24	30	37.2
	Minimum	23	26	34	26	9	10	25	32	37	39	14	30	30	31	36	30	12	12	5	4	8	22	7	5	7	6	7	13	17	18	6	18.7
Elizabeth	Maximum	47	57	48	41	33	50	62	66	69	56	34	36	45	46	51	45	30	36	31	34	32	34	33	31	35	29	33	43	40	29	32	41.5
	Minimum	28	31	38	26	16	20	30	30	45	30	18	29	33	39	41	30	15	24	9	12	26	28	14	7	2	10	12	32	21	22	13	23.6
Flemington	Maximum	41	56	45	38	37	50	57	63	67	57	29	35	42	42	49	45	29	35	31	30	31	33	28	31	34	27	28	42	38	26	31	39.6
	Minimum	26	27	34	27	15	16	29	33	42	28	16	25	31	33	40	28	15	21	4	6	23	26	11	5	6	8	6	27	16	20	8	21.0
Jersey City	Maximum	48	57	54	36	34	50	59	64	66	54	33	40	49	48	50	43	30	38	23	30	34	33	32	29	31	23	33	40	34	32	33	40.6
	Minimum	37	46	34	26	18	30	42	48	46	27	19	33	36	40	40	26	16	22	10	15	27	27	18	12	19	11	20	33	21	20	18	27.0
Lambertville	Maximum	41	53	50	35	32	45	66	61	62	58	26	37	42	41	47	39	24	31	24	27	30	30	25	25	29	25	33	38	33	24	29	37.5
	Minimum	30	38	35	20	14	25	38	44	49	20	15	25	33	35	38	29	14	20	3	7	22	25	13	5	13	6	10	30	18	18	11	22.7
Little Falls§§	Maximum	41	57	47	35	34	50	58	65	62	48	33	39	39	43	49	34	31	36	23	28	32	32	30	30	32	24	30	47	32	25	31	38.6
	Minimum	25	28	35	29	12	17	28	36	44	40	15	19	32	34	37	32	14	17	8	9	14	24	11	10	10	8	10	19	20	20	8	21.5
New Brunswick	Maximum	44	59	50	42	37	51	63	66	68	55	29	36	42	42	49	46	30	35	33	30	31	33	30	28	32	29	32	38	36	25	32	40.4
	Minimum	28	32	40	29	15	22	30	46	48	29	17	28	34	36	40	30	16	20	8	10	23	26	11	7	9	7	7	30	17	19	6	23.2
Paterson	Maximum	42	55	43	41	30	49	57	64	61	48	41	36	43	43	47	46	31	35	34	27	30	31	29	29	31	27	30	42	38	29	31	39.4
	Minimum	30	34	38	27	15	23	33	38	47	41	17	28	35	39	41	28	16	24	10	9	25	28	18	11	16	10	15	28	21	21	15	25.2
Plainfield	Maximum	47	57	55	36	35	50	59	64	67	58	33	40	50	48	50	43	28	35	21	29	31	31	27	28	32	22	32	40	31	29	31	40.0
	Minimum	29	30	33	25	14	17	29	32	45	27	15	26	34	39	38	26	14	22	6	9	25	27	18	10	13	9	9	31	20	20	8	22.6
Ridgefield	Maximum	43	55	49	34	32	49	60	64	61	44	31	37	42	42	46	39	25	34	20	26	30	29	27	27	30	21	31	40	33	33	29	37.5
	Minimum	28	35	33	18	12	24	37	39	41	17	14	30	34	38	39	19	14	15	9	11	25	19	16	10	16	9	24	29	19	17	10	22.6
Somerville	Maximum	43	57	45	38	37	49	58	64	66	50	28	35	41	42	47	45	29	34	32	30	31	31	30	29	31	28	31	38	35	27	32	39.1
	Minimum	24	27	34	27	13	17	30	36	45	27	16	27	32	32	41	29	14	21	8	8	25	27	8	5	6	7	8	31	17	22	6	21.6
South Orange	Maximum	45	56	48	41	32	49	59	65	67	55	30	36	45	43	47	46	31	34	33	29	30	31	31	28	32	27	30	41	38	30	31	40.0
	Minimum	26	34	37	25	14	18	30	33	46	30	17	27	34	38	41	30	13	21	7	9	24	27	13	7	12	7	10	29	19	21	8	22.8
Verona	Maximum	42	54	50	34	30	47	57	63	61	45	29	36	44	41	46	39	24	33	19	26	29	29	25	27	28	18	31	41	33	23	28	36.5
	Minimum	31	42	33	19	14	26	41	47	41	17	15	27	34	36	39	19	13	11	6	10	23	19	13	8	18	8	14	27	17	16	11	22.4
New York, N. Y	Maximum	49	57	54	36	33	51	59	64	65	48	33	40	49	47	50	43	30	39	24	31	35	33	32	29	31	23	34	40	35	32	33	40.6
	Minimum	38	47	34	22	18	32	43	49	46	19	20	33	36	40	40	21	16	18	10	16	27	25	18	12	20	11	22	34	21	21	18	26.7
The Southern Interior.																																	
Belleplain	Maximum	58	65	58	42	40	55	65	68	72	64	35	55	55	58	58	48	30	47	33	37	33	33	33	34	38	32	38	....	36	28	34	46.1^{a}
	Minimum	23	45	40	28	9	19	39	49	47	33	19	27	37	41	46	28	7	19	8	4	27	20	19	7	13	10	17	....	22	20	0	24.1^{a}
Burlington	Maximum	50	59	55	42	39	52	61	67	70	66	34	40	47	45	49	47	33	35	35	29	32	32	31	31	34	33	34	38	37	28	32	42.5
	Minimum	33	45	42	28	18	39	41	42	47	32	20	25	37	35	41	33	17	22	9	12	26	26	16	9	18	18	19	23	17	18	17	26.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	52	62	51	40	38	54	66	68	69	64	30	39	44	46	49	47	30	35	32	30	34	32	30	28	34	28	36	39	36	27	32	42.0
	Minimum	25	34	40	24	14	18	28	42	49	30	16	27	34	33	38	30	15	22	9	11	24	26	10	7	16	9	10	30	18	20	5	23.0
Indian Mills	Maximum	57	65	60	42	39	54	66	68	71	66	33	45	49	50	50	50	33	36	34	37	35	32	32	32	36	33	34	38	38	28	34	44.4
	Minimum	25	40	42	30	12	22	32	44	47	33	19	27	38	41	43	31	18	23	9	5	28	28	16	2	10	11	12	32	22	20	6	24.8
Lakewood	Maximum	51	64	56	41	33	54	64	67	69	57	32	47	50	46	49	47	31	35	33	34	32	32	30	29	33	28	35	38	37	28	32	42.4
	Minimum	25	40	40	28	14	22	36	46	48	31	22	31	39	40	43	31	17	24	10	11	28	29	17	9	11	11	11	33	22	24	6	25.8
Moorestown	Maximum	48	61	55	37	38	50	64	66	68	59	32	40	47	45	49	40	24	34	19	30	30	31	22	31	34	24	34	37	32	25	29	39.8
	Minimum	28	45	34	22	16	26	35	50	48	21	18	32	36	38	41	23	16	14	8	12	26	18	15	8	15	12	16	32	20	20	9	24.3
Pemberton	Maximum	54	63	56	43	39	53	66	68	70	64	33	41	48	47	49	48	31	35	34	32	33	32	32	29	33	30	35	38	37	28	31	43.0
	Minimum	28	43	41	30	16	25	33	46	48	31	18	27	36	40	42	29	17	23	9	13	27	27	14	6	11	12	12	33	21	21	5	25.3
Pleasantville§§	Maximum	52	58	53	40	38	52	59	60	63	65	44	55	53	53	53	....	45	47	23	36	33	31	27	35	39	35	39	39	30	28	35	44.0^{a}
	Minimum	24	38	42	29	15	19	37	44	46	43	22	27	41	42	42	34	18	19	10	9	14	22	20	10	12	11	16	32	23	23	8	25.5
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	47	60	52	38	37	52	64	66	67	52	32	39	45	43	51	42	29	35	19	32	34	33	25	31	33	22	35	41	34	27	35	40.4
	Minimum	33	44	35	22	19	29	40	48	46	23	17	32	36	37	42	22	17	16	8	13	25	22	15	11	18	11	20	33	22	20	17	25.6
Tuckerton	Maximum	53	57	55	45	41	51	58	62	63	63	56	52	52	54	52	50	35	35	32	37	33	32	32	35	38	32	33	37	40	40	34	44.8
	Minimum	28	40	40	35	14	26	36	40	40	41	19	32	40	40	42	30	16	32	8	10	27	28	18	9	18	11	12	16	32	21	22	26.5
Philadelphia, Pa	Maximum	51	60	55	39	38	51	60	67	69	59	35	43	50	47	51	44	29	37	23	32	35	35	28	31	35	27	37	37	35	29	32	42.0
	Minimum	37	47	38	28	25	32	43	51	53	25	21	35	40	41	44	27	20	17	11	17	29	28	20	16	24	16	22	32	24	23	22	29.3
The Sea Coast.																																	
Asbury Park	Maximum	48	63	53	37	37	49	50	50	51	47	39	45	45	46	49	47	39	43	26	34	33	33	31	30	35	26	37	39	37	30	32	40.7
	Minimum	36	30	34	26	20	31	43	43	43	28	24	37	41	41	40	25	17	26	11	16	29	29	17	12	18	12	18	34	23	15	16	26.9
Atlantic City	Maximum	49	51	53	40	39	49	53	53	57	63	41	53	51	56	54	47	38	47	24	33	34	33	29	34	37	29	43	41	35	31	33	42.9
	Minimum	39	44	34	26	20	39	46	44	48	28	25	41	41	42	44	27	20	20	11	17	29	29	22	15	26	18	29	33	25	24	19	29.8
Cape May City	Maximum	52	61	52	39	40	50	54	56	59	61	43	51	49	56	54	45	33	45	26	32	36	35	30	33	36	30	40	39	35	28	34	43.0
	Minimum	37	43	37	24	18	38	43	44	46	26	24	42	42	43	45	28	21	22	15	16	31	30	24	18	28	20	30	35	23	22	16	30.0
Long Branch	Maximum	50	63	51	37	35	50	60	61	62	50	39	42	45	43	50	41	35	44	21	28	30	31	27	27	30	21	32	37	29	26	30	39.6
	Minimum	43	40	35	24	21	30	40	44	42	25	24	37	38	40	40	28	20	20	9	12	25	22	15	10	15	12	15	31	20	21	12	26.0
Sandy Hook	Maximum	46	56	49	36	33	49	57	59	59	46	37	41	42	42	46	41	31	39	21	29	31	31	28	28	31	25	34	37	36	28	30	38.6
	Minimum	36	42	36	24	21	32	39	46	41	23	20	37	37	40	40	24	18	20	11	18	29	28	18	14	21	12	19	32	23	23	22	27.3

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is chargec to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. FEBRUARY, 1930. No. 2

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GENERAL SUMMARY.

The month was well above the normal in temperature, as shown by the average for the State, but there was an unusual range. On the 25th the thermometers recorded maxima mostly in the seventies. At Pleasantville, Atlantic county, the mercury touched 80 degrees which is the highest ever recorded in the State on a winter day (December to February. inclusive). About one week previously, mostly on the 16th and 17th, the temperature was below zero over practically the entire State; during the eight days following most stations experienced a rise of from 80 to 85 degrees.

Precipitation was quite deficient, except over the southern interior where it was nearly normal. For the State, as a whole, it averaged about three-fourths of the normal amount, and occurred during three rather distinct periods,–the 4th to 6th, 14th to 16th, and the 23d to 26th, dates inclusive. There was less snow than is usual during February. It was confined mostly to the 15th and 16th, the amounts ranging from two to eight inches; the heaviest occurred, as usual, in the Highlands.

There were no damaging wind or hail storms reported, and the sunshine averaged about 62% of the possible amount, 56% being the normal for the month of February.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 35 stations, was 35.6°, which was 6.2° above normal. The highest temperature was 80° at Pleasantville on the 25th, and the lowest, −10°, at Layton on the 17th. The greatest daily range of temperature was 47° at Charlotteburg on the 26th. The highest monthly mean temperature was 39.4° at Atlantic City, and the lowest, 30 6° at Boonton.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +4.0°; Red Sandstone Plain, +3.8°; Southern Interior, +4.6°; Sea Coast, +3.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 2.80 inches, which was 0.80 inch below normal. The average total snowfall at 20 selected stations was 4.2 inches. The greatest monthly precipitation was 5.13 inches at Asbury Park, and the least, 1.07 inches at Cape May City. The greatest amount of precipitation in any 24 consecutive hours was 1.91 inches at Trenton on the 13-14th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 9, or the normal number.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands. —2.62 inches; Red Sandstone Plain, —2.04 inches; Southern Interior, —0.20 inch; Sea Coast, —0.75 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 12 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 48 miles per hour from the northwest at Sandy Hook on the 16th.

MISCELLANEOUS.

The per cent of possible sunshine was 62, or 6 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.10 inches, which was normal. The highest reading observed was 30.64 inches on the 17th at Ridgefield and Trenton, and the lowest was 29.48 on the 5th at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 4.2 feet, and the highest stage was 8.6 feet on the 23d. The mean stage at Trenton was not determined because the water was frozen around the gage on 17 days. The river was not frozen over at any time, nor was it unusually low or high at any time.

Several stations reported thunderstorms on one or two days, namely, 13th, 24th, 25th and 26th. Sleet was noted on the 4th, 7th, 9th, 26th and 27th. Some stations reported light hail on the 25th, 26th and 27th. Dense fog was reported on one or more of the following days; 2d, 3d, 4th, 5th, 13th, 22d, 23d, 24th, 25th and 26th.

ERRATA.

November 1929. Cape May City, partly cloudy days should be 13, instead of 12; cloudy days 13 instead of 14.

December 1929. Lakewood, minimum temperature should be 13° on the 2d instead of 14° on the 1st.

Annual 1929. New York City, partly cloudy days should be 144 instead of 143; cloudy days 140 instead of 141; prevailing wind direction should be northwest.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	23.9	54	−2	3.93	5.85	1.44	......	......	......	......	......
1886	28.9	64	−10	5.42	8.00	4.13	......	......	......	......	......
1887	33.9	69	6	5.24	6.74	4.13	......	......	......	13	13
1888	30.6	60	−5	3.53	6.01	2.04	......	......	......	9	8
1889	27.7	53	−3	2.49	3.80	1.65	......	......	......	9	8
1890	**39.9**	76	**14**	4.17	5.32	2.43	......	......	......	12	10
1891	38.0	71	1	5.11	7.20	3.70	......	6	9	13	14
1892	33.6	58	7	1.63	3.62	0.67	......	7	9	13	7
1893	30.1	63	−1	5.73	8.90	3.14	...	7	8	13	11
1894	29.7	62	−11	4.42	6.17	3.25	......	9	8	11	11
1895	23.6	57	−12	1.28	2.34	*0.55*	11.6	13	9	6	5
1896	32.1	62	−12	**6.77**	**10.06**	**4.82**	6.7	9	9	11	12
1897	32.5	59	−6	3.61	6.37	2.38	8.0	8	10	10	8
1898	32.7	65	−15	3.48	5.45	1.55	2.0	12	7	9	9
1899	25.8	60	−17	6.06	8.77	3.78	**31.3**	10	6	12	15
1900	31.0	69	−6	5.30	7.88	3.27	9.6	9	9	10	10
1901	25.4	*52*	−6	*0.94*	*1.65*	0.69	4.9	15	9	4	4
1902	27.4	62	−7	6.24	8.44	4.29	16.5	12	6	10	9
1903	33.7	70	−16	4.87	6.60	3.74	6.7	12	8	8	10
1904	24.8	65	−16	2.45	3.09	1.36	5.6	13	8	8	8
1905	*23.4*	53	−18	2.53	3.96	0.70	7.3	14	7	7	7
1906	30.9	64	−12	2.58	3.85	1.77	5.4	14	7	7	7
1907	23.6	55	−22	2.67	3.90	1.82	20.8	14	7	7	8
1908	28.1	65	−17	4.79	7.44	2.85	11.9	10	10	9	9
1909	37.8	72	−2	4.96	6.78	3.55	2.3	6	10	12	12
1910	30.5	69	−11	3.08	4.81	1.06	6.2	10	9	9	10
1911	30.9	67	−12	2.78	4.06	1.76	11.2	8	7	13	11
1912	27.7	61	−14	2.49	3.12	1.68	2.8	11	12	6	5
1913	30.6	70	−5	2.49	3.21	1.48	3.5	16	6	6	7
1914	25.9	67	−12	2.85	4.94	1.89	15.1	12	7	9	9
1915	35.7	75	−7	5.37	7.28	2.97	3.5	11	6	11	8
1916	28.1	63	−18	4.21	6.17	2.84	11.4	10	6	13	11
1917	28.1	62	−19	1.95	2.80	0.92	8.3	10	9	9	11
1918	29.0	67	*−23*	2.08	3.41	1.03	2.6	12	8	8	7
1919	33.6	65	4	3.39	6.48	1.37	1.2	15	4	9	10
1920	27.9	54	−17	4.20	7.20	2.39	20.0	11	8	10	11
1921	34.0	71	−5	3.81	5.82	2.58	13.6	10	8	10	10
1922	33.6	73	−10	2.94	4.60	1 80	8.5	10	8	10	10
1923	26.1	56	−12	2.58	3.74	1.51	13.8	10	8	10	12
1924	28.9	62	−3	4.10	6.11	2.45	11.9	13	5	11	9
1925	37.3	72	−1	2.23	4.64	1.18	*0.7*	12	6	10	7
1926	29.4	57	−11	4.54	6.30	2.86	21.2	9	5	14	11
1927	36.1	66	4	3.12	4.55	2.18	5.1	10	8	10	11
1928	32.1	63	−6	4.05	5.63	2.17	4.4	12	7	10	10
1929	31.6	63	−9	4.06	5.92	2.76	9.2	13	7	8	8
1930	35.6	**80**	−10	2.80	5.13	1.07	4.2	13	7	8	9

W. B. O.Philadelphia-3-18-30-1050.

Climatological Data for February, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	34.0^{a}	+6.9	74^{a}	25	−1^{a}	17	41^{a}	2.12	−1.72	0.95	2.0	8	15	6	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	32.6	+7.0	71	25	−4	17	47	1.83	−2.19	0.68	4.5	8	9	10	9	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	......	......	......	−7	17	....	1.95	−1.11	0.59	8.3	8	14	3	11	e.	Brice E. Riker.
Dover	Morris	600	46	33.1^{c}	+6.9	73^{c}	25	−1	17	31^{c}	2.19	−1.84	0.74	3.9	7	12	8	8	......	William C. Harris
Layton	Sussex	480	29	31.0	+7.4	75	25	−10	17	43	1.70	−1.04	0.57	4.0	10	10	2	16	sw.	A. M. Depue.
Long Valley	Morris	520	....	......	......	......	......	......	......	....	....	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	46	32.7	+6.2	76	25	−3	17	43	1.82	−1.74	0.42	8.5	10	10	7	11	sw.	Irving J. Kern.
Phillipsburg	Warren	363	47	34.4	+6.5	75	25	6	16	36	2.75	−0.89	0.93	2.3	9	15	6	7	......	Town Engineer.
Sussex	Sussex	442	35	32.2^{d}	+6.8	73^{d}	25	−8^{d}	17	46^{d}	1.64	−1.74	0.45	......	6	....	....	....	......	A. J. W. Mowatt
Means and extremes			....	32.9	+6.8	76	25	−10	17	47	2.00	−1.53	0.95	4.8	8	12	6	10	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	36.9	+7.5	74	25	8	16†	36	3.55	−0.43	1.45	5.0	7	19	2	7	w.	William Mann.
Boonton	Morris	400	§40	30.6	+3.5	69	25	−3	17	40	1.84	−2.13	0.65	......	8	15	1	12	sw.	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	....	2.90	−0.53	0.75	4.0	9	16	6	6	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	36.0^{a}	+5.5	72	25†	4^{a}	17	41^{a}	3.53	−0.64	1.11	3.5	11	14	6	8	ne.	Union County Park Com.
Flemington	Hunterdon	140	§44	35.4	+6.6	77	25	1	17	39	2.66	−0.88	0.73	2.0	11	16	4	8	nw.	Hiram E. Deats.
Jersey City	Hudson	10	32	37.1	+6.5	74	25	6	17	33	3.54	−0.18	1.51	3.8	11	11	9	8	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	43	35.0	......	74	25	−1	17	37	3.22	−0.26	1.10	2.7	12	17	2	9	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	34.0	+4.4	75	25	−2	17	38	2.28	−1.19	0.67	2.0	9	15	6	7	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	36.2	+5.4	76	25	−1	17	41	3.00	−0.62	1.39	2.0	11	12	9	7	w.	N. J. Experiment Station
New Milford‡‡	Bergen	9	12	......	......	......	......	......	......	....	2.04	......	0.68	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	69	36.8	+6.6	75	25	5	17	40	1.95	−2.26	0.52	3.5	14	11	9	8	sw.	Marion T. Probert.
Plainfield	Union	120	42	34.5	+5.8	76	25	−2	17	38	3.21	−0.75	1.28	3.3	8	6	13	9	sw.	E. D. Pearson.
Ridgefield	Bergen	80	13	34.0	......	74	25	0	17	34	2.61	......	0.97	4.0	11	12	9	7	nw.	George P. Kirsten.
Somerville	Somerset	70	47	......	......	......	......	−3	17	....	2.58	−1.20	0.88	2.7	11	12	6	10	nw.	Julius Gerlich.
South Orange	Essex	200	58	35.8	+6.8	77	25	−2	17	44	2.13	−1.80	0.61	2.2	9	8	8	12	w.	Everett W. Bird.
Verona	Essex	490	4	33.7	......	72	25	0	17	24	2.22	......	0.61	5.0	12	9	7	12	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	1.97	......	0.69	......	9	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	60	37.0	+5.7	73	25	7	16	36	3.40	−0.42	1.52	3.6	11	5	11	12	nw.	U. S. Weather Bureau.
Means and extremes		......	....	35.1	+5.9	77	25	−3	17	44	2.66	−0.99	1.51	3.3	10	13	6	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	38.2^{a}	+6.7	79	25	−8^{a}	17	43^{a}	2.17	−1.42	0.52	2.5	10	7	8	13	sw.	A. F. Waldron.
Burlington	Burlington	12	§44	37.9	+6.7	74	25	6	16	35	4.01	+0.51	1.74	1.4	11	14	5	9	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	36	36.2	+6.8	77	25	−5	16	38	3.51	−0.09	1.64	2.5	7	13	6	9	sw.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	37.6	+5.8	79	25	−9	17	40	3.78	+0.33	1.70	5.5	9	12	9	7	sw.	James M. Armstrong.
Lakewood	Ocean	54	26	36.8	+7.1	77	25	−7	17	41	4.19	+0.62	1.25	5.0	11	13	5	10	sw.	R. W. Holman.
Moorestown	Burlington	......	67	36.6	+5.3	79	25	2	17	30	3.80	+0.32	1.89	2.0	8	12	6	10	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	......	......	......	......	......	....	1.96	−0.83	0.59	4.0	9	....		....	......	William L. Flick.
Pemberton	Burlington	55	....	37.4	......	78	25	−2	17	38	3.59	......	1.49	2.0	10	16	5	7	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	36.2	......	80	25	−7	17	41	2.46	−0.35	0.86	......	9	21	3	4	nw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	......	......	......	......	......	......	....	3.64	......	1.72	......	8	13	11	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	37.6	+6.9	76	25	6	16	34	3.81	+0.54	1.91	2.7	11	9	7	12	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	5	......	......	......	......	......	......	....	3.85	......	1.83	3.4	9	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	39.0	+8.2	78	25	−3	17	38	2.90	−0.76	0.82	7.0	10	18	0	10	sw.	John H. Brown.
Philadelphia, Pa	......	117	59	40.1	+6.2	79	25	8	16	29	3.65	+0.33	2.05	1.5	9	9	8	11	sw.	U. S. Weather Bureau.
Means and extremes		......	...	37.4	+6.7	80	25	−9	17	43	3.36	−0.11	1.91	3.5	9	13	6	9	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	37.7	+6.3	79	25	7	16	37	5.13	+1.63	1.78	5.0	7	22	3	3	nw.	Information Bureau.
Atlantic City	Atlantic	16	57	39.4	+5.8	77	25	8	23	33	2.07	−1.29	0.65	3.6	10	9	13	6	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	39.2	+5.1	74	20	8	17	33	1.07	−2.22	0.41	5.7	10	10	10	8	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	34.9	+4.5	76	25	−2	17	31	3.48	−0.43	1.76	4.5	10	13	9	6	nw.	William D. Martin.
Sandy Hook	Monmouth	22	32	35.8	+5.2	68	25	9	16	28	3.63	−0.12	1.68	4.1	12	8	11	9	w.	U. S. Weather Bureau.
Means and extremes		......	....	37.4	+5.4	79	25	−2	17	37	3.08	−0.49	1.78	4.6	10	12	9	7	nw.	
For the State		......	....	35.6	+6.2	80	25	−10	17	47	2.80	−0.80	1.91	4.2	9	13	7	8	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for February, 1930

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						.10							.95	.12	.08	.04							.06	.18		.59						2.12
Charlotteburg	Passaic				.08	.60		.04			T.				.53		.16								.15		.19	.08					1.83
Culvers Lake	Delaware				.17	.38					T.			.45	.06	.18	.04									T.	.59	.08					1.95
Dover	Passaie				.74			.04						.45	*	.25								.12			.59						2.19
Layton	Delaware				*	.57		.02			T.			.38	.04	*	.05							.02	.05	T.	.57	T.					1.70
Long Valley																																	
Newton	Delaware				.16	.33	T.	.03			T.			.42	.12	.18	.05							T.	T.	.13	.30	T.	.10				1.82
Phillipsburg	...do				.59	.20	.04	.02			T.			.50	T.	.14								.25	T.	.08	.93	T.					2.75
Sussex	Hudson				.45									.38	.12	.12									.12		.45						1.64
The Red Sandstone Plain.																																	
Bayonne	Coast				.70		T.				T.			1.45	T.	.30								.25	.05	.20	.60						3.55
Boonton ‖	Passaic		T.			.65		T.				T.		.12	.44		.11								.06	.01	.16	.29					1.84
Chatham ‖	...do					.75		T.			T.	.02		.21	.61		.29							.11	.04	.48	.39						2.90
Elizabeth	Coast		T.		.10	.61					T.	.01		1.11	.18	.07	.48								.08	.08	.62	.19					3.53
Flemington	Raritan				.11	.59		.06			T			.73	.12	.11	.05							.02		.25	.46	.16					2.66
ersey City	Coast		T.		.30	.52		.01		T.	T.			1.51	.06	.16	.12								.03	.05	.75	.03					3.54
Lambertville	Delaware				.20	.64	T.	.03			.04			1.10	.15	.07	.12								.04	.20	.54	.09					3.22
Little Falls. ‖	Passaic					.67		.01			T.			.14	.59		.20								.04	.04	.29	.30					2.28
New Brunswick	Raritan				.10	.61		.03			T.			1.39	.16	.03	.15							T.	.03	.06	.37	.07					3.00
New Milford.**	Hackensack				.68								.13	.59		.08								.05	.08	.17	.26						2.04
Paterson	Passaic		T.		.10	.52	.02	.01		.02	.04			.47	.10	.06	.06								.05	.03	.44	.03					1.95
Plainfield	Raritan	T.			.61		T.	.03			T.			1.28	.07	*	.24							T.	.03	.05	*	.90					3.21
Ridgefield**	Hackensack				*	.73		.01		T.	T.			*	.97	*	.35							*	.05	.04	.46						2.61
omerville	Raritan				.11	.54		.03			T.			.88	.16	.05	.09								.03	.08	.60	.01					2.58
outh Orange	Rahway				.08	.10		T.						.61	.13	T.	.27								.06	.08	.60	.20					2.13
Verona**	Passaic	T.			.43	.15	T.	.02		.01	T.			.57	.04	.27	T.							.06	.02	.03	.61	.01					2.22
Woodcliff Lake**	Hackensack				.69			.02					.09	.51		.23								.05	.04	.07	.27						1.97
New York, N. Y***	Coast	T.			.59	.20	.01	T.		T.	T.			1.50	.02	.28	.01							.03	.02	.03	.71	T.					3.40
The Southern Interior.																																	
Belleplain	Tuckahoe				.30	.48								.52	.22	.10	.15								.08	.17	.13	.02					2.17
Burlington	Delaware				.15	.71	T.	.01	T.		T.			1.74	.42	.02	.09							T.	.15	.36	.32	.04					4.01
Clayton	Delaware																																
Hightstown	Raritan				.10	.59		T.						1.64	.20		.30									.32	.36						3.51
ndian Mills	Mullica				.20	.46		T.						1.36	.34	.10	.42								.31	.20	.39						3.78
akewood	Metedeconk				.25	.55		.04	T					1.25	.25	.22	30								.50	.37	.34	.12					4.19
Moorestown ‖	Delaware					.82		T.						.13	1.89		.20								.10	.28	.05	.33					3.80
Northfield	Coast				.20	.59								.25	.15	.10	.24								.02	.15	.26						1.96
Pemberton					.20	.50		T.						1.49	.25	.04	.25								.10	.35	.38	.03					3.59
Pleasantville ‖	Coast					.86	T.	T	T.					.01	.51		.50								.01	.27	T.	.30					2.46
Lunyon	Coast			.05	.75			.03						1.72	.15		.28								.18		.48						3.64
renton***	Delaware				.59	.24	.01	T.		T.	T.			1.88	.03	.17	.04							.05	.26	.04	.50	T.					3.81
renton No. 2 ‖	Delaware		T.			.84		.03	T.		T.	T.		.11	1.72		.22								.06	.32	.06	.49					3.85
uckerton	Coast				.11	.71								.04	.50	.20	.50			T.					.12	.17	.30	.25					2.90
hila., Pa***	Delaware				.58	.21	T.	T.			T.			2.04	.01	.17	T.							.04	.15	.06	.39	T.					3.65
The Sea Coast.																																	
sbury Park	Coast				1.62	T.	T.	T.			T.			1.78	T.	*	.82							T.	.30	.20	41	T.					5.13
tlantic City***	...do				.47	.18	T.		T.					.34	.02	.33	.12							.12	.04	.16	.29						2.07
ape May City	...do				.24	T.		T.	.02					.24	.17	.09	.17							.02	.02	.01	.09	T.					1.07
ong Branch**	...do.				.56		T.	.02			.01			1.76		.31	.07							.07	.03	.09	.56						3.48
andy Hook***	...do				.73	.23	.01	.01		T.				1.64	.04	.32	.06							.07	.04	.04	.44	T.					3.63

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip- ation measured in the morning; amount then recorded is for the preceding 24 hours. - § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.11	30.63	17	29.49	5	15.1	42	s.	13	75	64	73	61
ong Branch	30.10	30.62	17	29.50	5					73	66	68	
Moorestown										81	63	77	
ew York, N. Y	30.09	30.63	17	29.52	5	14.7	58	w.	10	70	60	65	63
Philadelphia, Pa	30.12	30.65	17	29.54	5	12.2	35	n.	16	65	53	62	60
idgefield	30.09	30.64	17	29.52	5								
andy Hook	30.08	30.63	17	29.48	5	13.1	48	nw.	16	78	67	73	61
renton	30.10	30.64	17	29.51	5	8.8	29	nw.	10	73	56	67	62
erona													

Daily Temperatures for February, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	33	41	44	39	36	26	35	....	40	37	36	42	43	39	36	28	28	39	56	67	70	61	62	65	74	70	39	48	....	....	....	45.7ᵃ
	Minimum	7	17	29	29	7	12	22	....	9	30	18	12	33	25	24	4	−1	17	26	34	33	30	39	35	38	29	26	20	....	....	....	22.4ᵃ
Charlotteburg	Maximum	27	42	44	41	35	29	30	33	32	36	36	41	44	43	36	27	26	41	57	64	63	62	54	62	71	70	33	43	....	....	....	43.6
	Minimum	9	22	29	21	26	5	11	20	12	28	16	6	30	21	17	1	−4	14	32	42	44	27	36	35	47	23	20	18	....	....	....	21.7
Dover	Maximum	32	43	44	36	36	....	32	35	38	38	33	41	45	38	32	....	27	42	57	68	67	58	50	64	73	....	29	43	....	....	....	44.0ᶜ
	Minimum	16	24	24	24	23	7	13	21	12	22	17	10	18	22	18	1	−1	19	33	37	37	30	38	38	49	25	24	19	....	....	....	22.2
Layton	Maximum	30	44	45	37	35	22	25	34	35	38	32	39	41	39	31	25	25	37	55	66	65	58	54	67	75	66	32	45	....	....	....	42.8
	Minimum	11	24	32	18	22	−3	8	21	3	20	15	0	33	20	13	1	−10	17	28	28	28	29	38	35	43	23	22	18	....	....	....	19.2
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Newton	Maximum	32	41	43	40	35	27	29	35	37	37	34	40	42	41	35	26	27	38	51	67	66	59	54	63	76	67	34	42	....	....	....	43.5
	Minimum	12	23	34	18	22	1	7	19	15	25	15	11	30	21	20	0	−3	14	30	40	42	35	35	38	48	24	20	18	....	....	....	21.9
Phillipsburg	Maximum	43	42	42	37	36	30	29	33	38	38	33	42	44	39	32	22	25	39	57	66	68	57	52	63	75	58	37	44	....	....	....	43.6
	Minimum	9	19	33	26	30	12	15	22	15	26	21	19	32	27	22	6	16	20	29	32	32	33	41	38	49	29	28	22	....	....	....	25.1
Sussex	Maximum	33	40	44	37	36	29	24	35	....	....	....	42	42	40	35	28	28	39	56	67	....	63	55	67	73	70	33	44	....	....	....	44.2ᵈ
	Minimum	12	22	32	18	26	3	8	20	....	....	....	4	30	22	14	3	−8	15	29	33	....	28	37	32	42	24	21	16	....	....	....	20.1ᵈ
The Red Sandstone Plain.																																	
Bayonne	Maximum	35	36	46	44	35	26	36	38	40	38	35	42	50	42	31	22	26	42	58	65	69	57	55	64	74	64	52	46	....	....	....	45.3
	Minimum	20	20	32	33	25	10	20	26	26	18	20	27	34	28	26	8	8	19	37	44	52	40	42	44	52	28	35	25	....	....	....	28.5
Boonton§§	Maximum	33	41	46	38	35	18	31	36	39	39	33	34	43	39	33	15	26	40	56	66	66	58	50	63	69	38	36	47	....	....	....	42.1
	Minimum	8	11	28	22	24	8	8	17	13	16	17	10	15	23	18	3	−3	0	20	31	39	29	30	31	39	32	23	19	....	....	....	19.0
Elizabeth	Maximum	35	49	50	45	39	33	38	37	41	43	36	45	42	44	35	28	29	43	57	69	70	64	51	61	72	72	38	48	....	....	....	46.9
	Minimum	24	23	33	28	32	12	17	24	17	31	20	18	28	31	24	6	4	13	29	36	34	31	37	....	48	31	26	22	....	....	....	25.1ᵃ
Flemington	Maximum	35	43	50	40	36	31	32	36	40	40	39	49	45	43	36	27	29	44	60	71	72	62	50	69	77	71	42	51	....	....	....	47.1
	Minimum	9	17	30	26	30	11	15	22	15	31	19	15	28	26	24	4	1	14	27	34	37	31	37	32	45	32	28	23	....	....	....	23.7
Jersey City	Maximum	35	45	50	43	38	26	34	36	39	40	35	40	49	41	36	23	28	42	56	67	69	57	56	64	74	65	38	45	....	....	....	45.4
	Minimum	19	30	37	31	26	11	20	24	25	31	20	25	33	27	23	7	6	26	35	43	50	40	41	45	50	32	25	24	....	....	....	28.8
Lambertville	Maximum	33	42	44	36	37	30	32	32	38	39	32	43	46	43	35	26	24	40	55	66	66	57	56	62	74	68	36	42	....	....	....	44.1
	Minimum	16	24	34	27	29	11	15	22	20	27	19	17	33	24	23	3	−1	21	30	42	48	35	37	42	48	31	26	21	....	....	....	25.9
Little Falls§§	Maximum	42	45	49	38	38	20	32	38	40	40	37	43	45	41	35	20	32	44	60	73	70	58	54	67	75	35	39	46	....	....	....	44.9
	Minimum	16	21	31	24	27	9	12	18	18	31	20	14	22	25	22	5	−2	11	32	35	38	30	38	33	38	33	23	20	....	....	....	23.0
New Brunswick	Maximum	34	46	46	42	39	32	35	35	40	42	35	45	46	45	39	27	29	42	56	69	69	63	57	65	76	72	38	45	....	....	....	46.8
	Minimum	10	25	34	27	31	13	17	24	18	31	20	17	30	27	24	6	−1	18	30	38	45	31	36	35	50	31	28	22	....	....	....	25.6
Paterson	Maximum	34	44	50	44	38	33	30	37	41	42	35	43	46	45	36	28	27	43	59	72	69	59	55	67	75	70	38	45	....	....	....	46.6
	Minimum	18	27	35	26	33	12	16	25	22	31	21	20	31	26	25	7	5	20	34	40	41	37	40	39	50	30	25	23	....	....	....	27.1
Plainfield	Maximum	34	46	51	44	38	23	32	36	39	40	35	41	49	41	36	19	26	42	56	68	69	59	57	65	76	65	39	45	....	....	....	45.4
	Minimum	11	21	35	25	26	11	18	20	15	31	19	14	25	25	23	4	−2	17	30	33	31	36	37	35	48	32	26	21	....	....	....	23.6
Ridgefield	Maximum	33	45	48	35	36	24	29	37	40	40	24	43	47	38	33	19	24	42	57	70	68	67	56	64	74	50	36	44	....	....	....	43.7
	Minimum	17	27	29	23	24	9	15	21	20	22	19	16	33	25	19	4	0	20	33	39	44	33	38	35	48	24	23	20	....	....	....	24.3
Somerville	Maximum	33	41	46	37	36	32	31	31	38	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	7	19	31	25	31	12	17	19	14	31	19	12	27	26	22	5	−3	14	27	32	38	30	39	33	46	32	28	22	....	....	....	23.4
South Orange	Maximum	34	46	49	43	38	33	32	38	41	42	35	44	46	45	38	29	27	44	58	70	70	65	57	67	77	74	37	46	....	....	....	47.3
	Minimum	15	22	30	25	31	11	16	21	17	33	18	16	26	24	22	5	−2	14	30	35	42	30	39	36	49	30	25	21	....	....	....	24.3
Verona	Maximum	32	42	46	36	35	22	31	35	38	40	31	40	46	36	33	16	24	40	56	68	66	55	54	63	72	54	34	41	....	....	....	42.4
	Minimum	17	28	31	24	22	9	13	21	19	20	18	18	33	23	16	3	0	22	34	46	48	36	39	44	50	25	22	20	....	....	....	25.0
New York, N. Y	Maximum	35	45	50	43	37	26	35	37	39	40	34	40	48	40	36	21	28	42	56	66	68	56	55	63	73	65	38	45	....	....	....	45.0
	Minimum	20	30	37	32	26	11	20	25	26	25	20	26	34	27	21	7	7	29	35	45	52	40	42	47	50	29	25	24	....	....	....	29.0
The Southern Interior.																																	
Belleplain	Maximum	42	48	54	45	45	38	47	38	44	45	41	47	59	52	41	31	30	48	62	74	73	58	66	70	79	70	45	48	....	....	....	51.4
	Minimum	....	31	32	23	34	20	23	24	15	36	11	10	33	23	13	4	−8	14	25	35	30	34	34	47	39	39	31	20	....	....	....	24.9ᵃ
Burlington	Maximum	35	44	48	47	38	35	34	35	42	41	35	48	49	45	40	32	28	44	58	69	72	68	64	67	74	71	40	46	....	....	....	48.2
	Minimum	20	28	34	28	33	16	21	24	21	31	22	18	31	29	32	6	8	20	29	36	37	34	38	38	48	36	31	24	....	....	....	27.6
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hightstown	Maximum	36	47	46	42	38	32	36	37	44	38	34	46	47	46	37	28	28	46	58	70	71	62	66	67	77	64	40	47	....	....	....	47.5
	Minimum	8	28	31	25	32	14	19	21	18	30	19	15	32	27	25	−5	−4	17	30	40	33	30	40	36	50	33	27	22	....	....	....	24.8
Indian Mills	Maximum	40	50	50	44	42	33	39	36	44	44	39	48	49	49	41	31	31	48	62	72	70	63	67	69	79	73	40	46	....	....	....	50.0
	Minimum	7	30	31	25	33	18	21	24	14	16	21	11	31	29	20	6	−9	18	30	40	35	35	38	43	49	37	31	21	....	....	....	25.2
Lakewood	Maximum	35	47	49	42	42	33	38	37	43	44	34	44	48	48	37	28	26	45	59	69	70	60	64	64	77	72	39	41	....	....	....	47.7
	Minimum	8	30	30	25	33	17	22	27	19	33	21	14	38	29	24	6	−7	12	29	44	36	31	39	40	48	31	29	23	....	....	....	25.9
Moorestown	Maximum	35	44	47	37	38	30	33	34	42	43	34	47	49	42	35	15	26	43	59	71	70	62	63	66	79	61	39	44	....	....	....	46.0
	Minimum	15	29	33	28	30	15	20	24	22	26	21	18	34	29	20	6	2	23	31	41	43	36	40	40	49	31	29	24	....	....	....	27.1
Pemberton	Maximum	35	45	46	43	40	34	34	36	43	42	35	47	47	47	40	30	28	44	58	68	70	67	67	65	78	73	40	43	....	....	....	48.0
	Minimum	11	30	33	27	33	17	21	24	19	32	21	16	33	29	28	5	−2	18	29	41	35	36	40	40	49	35	30	24	....	....	....	26.9
Pleasantville§§	Maximum	42	50	53	45	40	34	48	39	44	46	37	45	50	42	37	19	34	44	59	75	73	52	55	66	80	46	41	41	....	....	....	47.8
	Minimum	5	9	32	24	31	21	20	28	19	25	17	12	20	29	19	7	−7	9	29	37	37	35	40	46	45	45	31	22	....	....	....	24.5
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Trenton	Maximum	38	45	46	38	38	32	37	36	41	42	36	48	49	42	36	16	28	45	58	70	70	62	63	66	76	65	40	46	....	....	....	46.8
	Minimum	20	30	36	29	32	13	19	25	24	26	21	23	32	28	20	6	7	26	33	40	46	39	40	41	51	31	29	25	....	....	....	28.3
Tuckerton	Maximum	35	50	53	50	49	40	48	48	42	47	45	45	48	50	40	38	35	44	60	74	74	69	56	65	78	68	41	44	....	....	....	51.3
	Minimum	8	32	30	28	34	18	22	25	20	37	18	16	30	18	24	5	−3	18	35	37	37	37	38	46	44	37	30	30	....	....	....	26.8
Philadelphia, Pa	Maximum	36	45	50	44	40	35	38	37	42	43	36	46	50	44	39	22	28	44	60	70	72	63	63	67	79	65	43	45	....	....	....	48.1
	Minimum	25	33	39	36	34	18	25	28	28	28	24	28	36	32	22	8	12	28	35	43	49	45	44	52	54	36	30	27	....	....	....	32.1
The Sea Coast.																																	
Asbury Park	Maximum	35	49	50	42	41	33	36	40	42	44	36	40	48	57	38	30	26	44	59	60	56	54	50	63	79	52	46	39	....	....	....	46.0
	Minimum	18	30	35	35	32	18	24	28	24	30	21	23	30	28	28	7	14	22	32	47	49	37	37	44	42	33	30	24	....	....	....	29.4
Atlantic City	Maximum	41	47	54	44	41	33	45	40	41	44	38	43	50	43	37	28	32	42	49	71	74	46	50	61	77	64	43	39	....	....	....	47.0
	Minimum	22	37	39	35	33	21	33	30	27	29	22	27	38	32	28	8	11	32	37	44	44	39	42	44	44	36	30	25	....	....	....	31.8
Cape May City	Maximum	42	47	54	45	40	33	44	36	42	46	35	45	53	43	40	27	33	46	54	74	70	53	51	64	73	61	45	42	....	....	....	47.8
	Minimum	19	36	35	30	29	24	29	28	26	29	24	22	36	32	27	10	8	33	33	41	41	41	41	44	43	37	32	27	....	....	....	30.6
Long Branch	Maximum	40	43	45	38	37	29	32	36	40	40	33	40	43	36	35	20	21	41	54	62	63	46	56	66	76	61	40	40	....	....	....	43.3
	Minimum	20	34	33	31	27	16	24	25	21	25	20	17	31	26	20	5	−2	21	28	40	39	28	40	43	46	30	29	26	....	....	....	26.5
Sandy Hook	Maximum	35	43	43	38	38	29	32	35	39	41	34	41	46	38	34	23	28	41	51	62	59	44	52	61	68	58	37	41	....	....	....	42.5
	Minimum	22	32	35	32	29	16	23	28	26	26	23	28	34	29	23	9	10	28	33	40	41	36	39	39	46	30	28	26	....	....	....	29.0

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

551.03
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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NEW JERSEY SECTION

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

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GENERAL SUMMARY.

There was no particularly outstanding feature about the temperature during the month in either averages or extremes. The maxima generally equalled, or fell a little short of those recorded during the extraordinarily warm period of the preceding month (February 25th). They occurred mostly on the 13th in the northeastern section of the State, and on the 17th over the remainder. The lowest readings were noted on the 3d and 5th, and were below the freezing point in all cases and mostly below 20 degrees. About one-third of the month could be said o have been favorable for the germination and growth of plant ife, but this portion was divided into three parts so that no proracted period of good growing weather prevailed.

The precipitation was quite deficient, not one station experiencing its normal amount. The average for the State, 2.54 nches, is about two-thirds of the normal. Approximately half of the monthly total fell during the rainstorm of the 7th-8th. This relatively dry condition is a continuation of the drier-thanusual weather prevailing since last October. The rain periods vere mostly during the 2d, 7th-8th, 11th-12th, 18th-19th, and 5th-26th,-quite evenly spaced throughout the month. The nowfall was very light, the average for the State being less than hat of any March since 1921, and the third smallest for any March in a record of the past 36 years. The greatest total at any tation during the month was that of 1.3 inches at Lambertville, Hunterdon County.

The month did not have recorded on its weather record any evere wind or hailstorms, or damage by lightning.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 35 stations, was 40.0°, which was 1.6° above ormal. The highest temperature was 78° at Indian Mills on he 18th, and the lowest, 9°, at Charlotteburg on the 5th and at Newton on the 22d. The greatest daily range of temperature vas 46° at Indian Mills on the 17th. The highest monthly nean temperature was 43.2° at Burlington, and the lowest, 36.3° t Layton.

The temperature departure from the normal for the year, 1930, o date, by sections, is: The Highlands, +3.3°; Red Sandstone lain, +3.0°; Southern Interior, +3.5°; Sea Coast, +3.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 2.54 inches, which was 1.32 inches elow normal. The average total snowfall at 20 selected staons was 0.1 inch. The greatest monthly precipitation was .80 inches, at Belvidere, and the least, 0.44 inch at Asbury ark. The greatest amount of precipitation in any 24 consecuve hours was 2.20 inches at Charlotteburg on the 7th-8th. The nean of the number of days on which 0.01 inch or more of prepitation fell was 7, or 4 less than normal.

The precipitation accumulated departure from the normal for he year 1930, to date, by sections, is: The Highlands, —3.18 inches; Red Sandstone Plain, —3.30 inches; Southern Interior, —1.70 inches; Sea Coast, —3.11 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 15 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 62 miles per hour from the east at Atlantic City on the 8th. High winds also occurred at each station on numerous days but caused no damage.

MISCELLANEOUS.

The per cent of possible sunshine was 66, or 5 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.81 inches, which was 0.20 inch below normal. The highest reading was 30.53 inches at Trenton on the 15th, and the lowest was 28.96 inches at Long Branch and Ridgefield on the 8th.

The mean stage of the Delaware River at Phillipsburg was 5.7 feet, and the highest stage was 9.5 feet on the 8th. The mean stage at Trenton was 3.2 feet, or 0 9 foot below the normal. The highest stage was 5.8 feet on the 10th.

Dense fog occurred on the 7th, 8th, 18th and 25th. Several stations in the central coast region reported thunderstorms on the 30th and at New Brunswick on the 11th. Moderate hail was reported at Long Branch on the 30th and a little light hail at New Brunswick on the 12th.

COMPARATIVE DATA FOR MARCH

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	*30.4*	66	2	*1.10*	2.29	*0.23*					
1886	37.7	70	9	3.70	5.27	2.59	......	......	......	......	......
1887	37.7	*61*	8	3.34	5.45	2.19	......	......	......	......	......
1888	32.8	72	0	5.71	8.22	3.75	......	......	.....	13	10
1889	40.5	67	**19**	3.79	6.49	1.98	......	......	......	12	11
1890	37.6	78	0	6.08	7.92	4.14	......	......	......	13	8
1891	37.2	68	4	5.06	8.02	2.05	......	......	......	13	14
1892	34.4	64	6	4.75	7.21	3.11	......	8	10	13	12
1893	37.0	68	6	3.73	6.26	2.36	......	10	12	9	9
1894	44.2	83	12	1.77	2.65	1.09	.....	10	10	11	10
1895	36.7	72	7	3.16	4.66	1.77	4.0	12	11	8	10
1896	34.0	69	−8	5.34	7.38	3.14	13.2	12	8	11	10
1897	40.0	77	18	2.78	4.32	1.55	1.6	13	8	10	11
1898	45.1	77	16	3.33	4.25	2.56	3.0	11	9	11	10
1899	38.6	73	13	6.54	9.58	3.45	5.4	9	10	12	12
1900	35.6	67	−9	3.51	4.96	2.48	7.0	7	10	14	13
1901	39.2	75	−8	4.64	8.07	2.40	0.9	12	12	7	10
1902	43.9	77	0	4.34	7.20	3.16	5.7	9	10	12	12
1903	47.6	79	13	5.13	8.53	3.60	*T.*	12	10	9	11
1904	37.2	72	1	3.43	4.76	2.02	4.5	11	8	12	10
1905	39.8	87	−7	3.95	5.06	2.80	2.6	11	8	12	13
1906	34.4	62	*−15*	5.09	6.77	2.91	11.2	14	8	9	12
1907	41.2	88	−11	3.04	4.38	1.81	11.5	10	9	12	11
1908	41.8	89	7	2.80	4.92	1.06	3.5	13	10	8	10
1909	38.3	74	−6	3.48	4.66	2.31	4.6	11	9	11	12
1910	44.5	88	10	1.22	2.36	0.29	1.1	12	10	9	13
1911	37.6	76	3	3.38	4.50	2.64	5.3	14	10	7	6
1912	36.9	72	3	**7.61**	**9.61**	**5.95**	6.6	10	12	9	11
1913	44.8	79	1	5.15	7.73	2.47	0.1	9	11	11	14
1914	35.4	75	−6	3.65	6.45	2.02	**20.5**	10	9	12	12
1915	36.1	63	11	1.13	*1.65*	0.58	7.4	13	10	8	10
1916	31.7	71	−7	3.48	4.96	2.38	19.3	20	7	4	3
1917	38.2	72	0	4.65	7.14	2.28	9.8	13	8	10	12
1918	41.8	82	8	2.06	3.76	0.99	0.7	12	8	11	13
1919	43.2	77	12	5.32	7.40	3.77	1.6	17	7	7	9
1920	39.4	79	−8	3.80	5.36	2.29	5.6	14	7	10	13
1921	**49.1**	**92**	11	3.03	4.65	1.80	*T.*	17	5	9	10
1922	41.1	82	2	4.52	7.10	3.42	3.7	14	10	7	11
1923	38.0	81	−3	4.09	6.73	2.13	6.3	12	6	13	13
1924	38.8	76	5	2.51	5.69	0.80	2.7	17	6	8	10
1925	43.3	80	1	3.47	6.09	1.50	0.3	16	6	9	8
1926	35.1	79	0	2.25	3.15	1.52	0.4	16	6	9	9
1927	41.9	81	9	1.46	2.73	0.78	0.3	16	9	6	7
1928	38.3	82	6	2.84	3.82	1.70	4.9	14	7	10	10
1929	44.9	81	5	3 07	4.92	1.92	0.7	14	8	9	10
1930	40.0	78	9	2.54	3.80	0.44	0.1	15	6	10	11

W. B. O Philadelphia 4-22-30 1050.

Climatological Data for March, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	40.3^{a}	+2.2	73^{a}	17	16^{a}	3	39^{a}	3.80	−0.05	2.00	T.	8	19	3	9	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	37.4	+1.6	60	13†	9	5	38	3.55	−0.65	2.20	0.2	9	14	8	9	nw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	......	......	......	11	3	....	3.02	−0.45	1.40	0.6	11	19	6	6	nw.	Brice E. Riker.
Dover	Morris	600	46	37.5^{b}	+2.3	69^{b}	17	12	5	38^{b}	3.58	−0.41	2.06	0.5	8	10	14	7	......	William C. Harris
Layton	Sussex	480	29	36.3	+0.7	72	17	11	5	44	3.17	−0.20	1.43	T.	7	14	3	14	nw.	A. M. Depue.
Long Valley	Morris	520	....	......	......	......	......	......	......	....	......	......	......	......	...	...	...	...	......	S. N .Dilts.
Newton	Sussex	769	46	37.4	+1.9	61	13	9	22	34	2.47	−1.10	1.36	T.	7	10	9	12	nw.	Irving J. Kern.
Phillipsburg	Warren	363	47	40.0	+1.9	71	17	18	3	37	3.17	−0.37	1.99	T.	7	20	6	5	.....	Town Engineer.
Sussex	Sussex	442	35	37.8^{a}	+1.5	70^{a}	17	12^{e}	4	41^{a}	2.34	−1.25	1.27	......	7	16	2	13	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	38.1	+1.7	73	17	9	5†	44	3.14	−0.56	2.20	0.2	8	15	7	9	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	40.6^{a}	+1.1	64	13	16	3	27	2.12	−1.88	1.02	T	5	20	7	4	w.	William Mann.
Boonton	Morris	400	§40	36.5	......	66	17	12	5	38	2.50	−1.44	1.27	......	7	18	3	10	sw.	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	....	3.22	−0.52	1.65	0.6	9	15	6	10	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	40.8	+2.0	65	13	16	3	35	2.70	−1.52	1.44	T.	8	19	8	4	nw.	Union County Park Com.
Flemington	Hunterdon	140	§44	41.4	+1.3	75	17	15	3	44	3.12	−0.77	2.18	0.5	7	22	5	4	nw	Hiram E. Deats.
Jersey City	Hudson	10	32	40.3	+1.1	63	13	17	3	30	2.27	−1.88	1.36	T.	7	15	10	6	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	43	39.6	......	71	17	16	3	38	3.20	−0.83	1.96	1.3	9	21	4	6	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	38.9	+0.9	65	13	16	5	34	2.65	−0.94	1.48	T.	10	16	3	12	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	40.5	+1.7	73	17	18	3	40	2.31	−1.50	1.34	T.	6	16	10	5	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	12	......	......	......	......	......	......	....	2.38	....	1.04	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	41.0	+2.2	64	13	18	3	31	2.49	−1.89	1.27	T.	8	18	6	7	nw.	Marion T. Probert.
Plainfield	Union	120	42	38.8	0.0	69	17	15	5	37	3.10	−1.17	1.59	0.2	7	12	14	5	n.	E. D. Pearson.
Ridgefield	Bergen	80	13	37.9	......	63	13	17	3	33	2.35	....	1.23	0.1	7	9	10	12	nw.	George P. Kirsten.
Somerville	Somerset	70	47	40.6^{e}	+2.4	74^{e}	17	15	5	44^{e}	2.65	−1.31	1.66	T.	6	16	4	11	nw.	Julius Gerlich.
South Orange	Essex	200	58	39.4	+2.3	65	13	16	3	37	3.17	−0.69	1.84	T.	8	13	6	12	w.	Everett W. Bird.
Verona	Essex	490	4	......	......	......	......	......	......	....	......	....	......	......	...	....	....	....	......	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	2.90	....	1.04	......	7	....	....	....	......	Hackensack Water Co.
New York, N.Y.	......	365	60	39.8	+2.1	62	13	17	3	29	2.16	−1.48	1.34	T.	8	9	12	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	39.7	+1.5	75	17	12	5	44	2.70	−1.26	2.18	0.2	8	16	7	8	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	41.4^{a}	+0.3	75^{a}	17	12^{a}	4†	43^{a}	2.05	−1.65	1.64	T.	7	12	3	16	sw.	A. F. Waldron.
Burlington	Burlington	12	§44	43.2	+2.8	74	17	18	5	34	8.03	−0.68	1.62	T.	7	16	8	7	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	...	...	...	...	......	Harry P. Campbell.
Hightstown	Mercer	120	36	41.0	+0.6	75	17	17	3†	45	3.11	−0.93	1.55	T.	5	19	5	7	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	41.4	+0.9	78	18	14	4†	46	2.35	−1.68	1.71	T.	4	12	14	5	nw.	James M. Armstrong.
Lakewood	Ocean	54	26	40.3	+0.7	68	17	16	5	37	2.40	−1.58	1.64	T.	6	15	7	9	nw.	R. W. Holman.
Moorestown	Burlington	......	67	41.0	+1.8	75	17	19	3†	42	2.33	−1.43	1.45	T.	5	14	9	8	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	......	......	......	......	......	....	1.21	−2.28	0.83	0	6	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	42.4	......	74	17†	19	3	41	1.95	....	1.43	T.	7	16	8	7	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	39.6^{a}	......	76^{a}	17	12^{a}	4	44^{a}	1.77	−1.70	1.25	......	5	21	7	3	w.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	......	......	......	......	......	......	....	2.68	....	1.52	......	4	19	9	3	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	41.0	+1.9	73	17	18	3	36	2.66	−0.74	1.37	T.	10	11	13	7	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	5	......	......	......	......	......	......	....	2.98	....	1.56	T.	8	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	41.4	+1.4	74	17	17	4	40	1.91	−2.34	1.03	T.	6	21	0	10	nw.	John H. Brown.
Philadelphia, Pa	......	117	59	43.7	+2.9	74	17	21	3	32	2.58	−0.81	1.65	T.	8	9	14	8	nw.	U. S. Weather Bureau.
Means and extremes	......	......	...	41.3	+1.3	78	18	12	4†	46	2.34	−1.50	1.71	T.	6	16	8	7	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	39.9	+0.9	65	13	18	3	36	0.44	−3.79	0.31	T.	3	23	6	2	nw.	Information Bureau.
Atlantic City	Atlantic	16	57	41.8	+3.2	65	17	20	3	26	1.30	−2.30	0.85	T.	7	12	13	6	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	42.6	+1.8	69	17	22	22	28	1.42	−2.31	1.06	T.	8	16	10	5	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	40.0	+1.5	63	13	22	3	29	3.31	−1.03	1.63	0.1	10	12	9	10	nw.	William D. Martin.
Sandy Hook	Monmouth	22	32	39.4	+2.4	58	13	19	3	23	1.68	−2.36	0.73	T.	10	11	11	9	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	40.7	+2.0	69	17	18	3	36	1.63	−2.36	1.63	T.	8	15	10	6	nw.	
For the State	......	......	....	40.0	+1.6	78	18	9	5	46	2.54	−1.32	2.20	0.1	7	16	7	8	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is Atsion; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for March, 1930

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	....	....	....	....	....	....	.30	2.00	....	....	.53	....	....	....	....	....	....	.10	.30	....	....	....	....	....	.47	.05	.05	....	....	....	....	3.80
Charlotteburg	Passaic	....	.07	....	....	....	....	.01	2.19	....	....	.15	.29	....	....	....	....	....	....	.28	....	....	....	....	....	.48	.06	.02	....	....	....	....	3.55
Culvers Lake	Delaware	....	.05	....	....	....	....	T	1.40	....	....	.30	.20	....	....	....	.03	.01	.03	.13	....	....	....	....	....	.82	.03	.02	....	....	....	....	3.02
Dover	Passaic	....	.08	....	....	....	....	*	2.06	....	....	.50	T.	....	....	....	....	....	*	.30	....	....	....	....	....	.59	T.	.05	....	....	....	....	3.58
Layton	Delaware	....	....	....	....	....	....	....	1.43	....	....	.44	....	....	....	....	....	.04	.18	.01	....	....	....	....	....	1.02	.05	T.	....	....	....	....	3.17
Long Valley		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Newton	Delaware	....	T.	....	T.	....	....	T.	1.36	....	....	.30	.06	....	....	....	....	....	....	.21	....	....	....	....	....	.47	.03	.04	T.	....	....	....	3.74
Phillipsburg	...do	....	T.	T.	....	....	....	.24	1.99	....	....	.34	T.	....	....	....	....	....	.05	.13	....	....	....	....	T.	.38	.04	T.	....	....	....	....	3.17
Sussex	Hudson	....	.12	....	....	....	....	....	1.27	....	....	.23	.06	....	....	....	....	.03	....	.13	....	....	....	....	....	.50	....	....	....	....	....	....	2.34
The Red Sandstone Plain.																																	
Bayonne	Coast	....	.10	....	....	....	....	....	1.02	....	....	.10	T.	....	....	....	....	T.	....	.35	....	....	....	....	....	*	.55	....	....	....	....	....	2.12
Boonton ‖	Passaic	....	.07	....	....	....	....	....	1.27	.31	....	....	.35	T.	....	....	....	....	T	.14	....	....	....	....	....	.14	.22	....	T.	....	....	....	2.50
Chatham ‖	...do	....	.07	.02	....	....	....	....	1.65	.33	....	....	.25	T	....	....	....	....	....	.23	....	....	....	....	....	.07	.56	....	.04	....	....	....	3.22
Elizabeth	Coast	....	.08	....	....	....	....	.03	1.44	....	....	.04	.04	....	....	....	....	....	....	.26	....	....	....	....	....	.80	.01	T.	....	....	....	....	2.70
Flemington	Raritan	....	.06	.05	....	....	....	.05	2.18	....	....	.26	T.	....	....	....	....	....	T.	.36	....	....	....	....	....	.16	T.	T.	....	....	T.	....	3.12
Jersey City	Coast	....	.05	....	....	....	....	.10	1.36	....	....	.10	T.	....	....	....	....	T.	.01	.20	....	....	....	....	....	.45	T.	T.	....	....	T.	....	2.27
Lambertville	Delaware	....	.09	.02	....	....	....	.12	1.96	....	....	.21	.03	....	....	....	....	....	T.	.39	....	....	....	....	....	.30	T.	.08	....	....	....	....	3.20
Little Falls ‖	Passaic	....	.06	T.	....	....	....	....	1.28	.20	....	....	.22	....	....	....	....	.01	.01	.10	....	....	....	....	....	.54	.22	....	.01	....	....	....	2.65
New Brunswick	Raritan	....	.03	....	....	....	....	T.	1.34	T.	....	.09	.08	....	....	....	....	....	....	.47	....	....	....	....	....	.30	T.	T.	....	....	T.	....	2.31
New Milford.**	Hackensack	.07	.02	....	....	....	....	1.04	.12	....	....	.23	....	....	....	....	....	....	.18	....	....	....	....	....	.14	.56	....	.02	....	....	....	....	2.38
Paterson	Passaic	....	T.	.03	....	....	....	T.	1.27	....	....	.18	.02	....	....	....	....	....	.02	.09	....	....	....	....	....	.85	....	.03	....	....	....	....	2.49
Plainfield	Raritan	....	.07	....	....	....	....	.50	1.59	....	....	.27	T.	....	....	....	....	....	.05	.20	....	....	....	....	....	.42	T.	T.	....	....	....	....	3.10
Ridgefield**	Hackensack	T.	.01	....	....	....	....	*	1.23	....	....	.05	T.	....	....	....	T.	....	T.	.30	....	....	....	....	....	.75	T.	.01	....	....	T.	....	2.35
Somerville	Raritan	....	.03	T.	....	....	....	.15	1.66	....	....	.22	....	....	....	....	....	....	....	.34	....	....	....	....	....	.25	....	T.	....	....	....	....	2.65
South Orange	Rahway	....	.08	T.	....	....	....	T.	1.84	....	....	.10	.12	....	....	....	....	....	....	.25	....	....	....	....	....	.70	.03	.05	....	....	....	....	3.17
Verona**	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
Woodcliff Lake**	Hackensack	.08	....	....	....	....	....	1.04	.21	....	....	.29	....	....	....	....	....	....	.14	....	....	....	....	....	.35	.79	....	....	....	....	....	....	2.90
New York, N. Y***	Coast	.01	.05	....	....	....	....	.30	1.04	....	....	.11	T.	....	....	....	T.	T.	.10	.09	....	....	....	....	....	.46	T.	T.	....	....	T.	....	2.16
The Southern Interior.																																	
Belleplain	Tuckahoe	....	.15	....	....	....	....	.04	1.60	....	....	.11	.06	....	....	....	....	....	....	....	....	....	....	....	....	.04	T.	....	....	.05	T.	....	2.05
Burlington	Delaware	....	.10	....	....	....	....	.02	1.60	....	....	.20	.04	....	....	....	....	....	....	.80	....	....	....	....	....	.27	T	....	....	....	....	....	3.03
Clayton	Delaware	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hightstown	Raritan	....	.26	T.	....	....	....	T.	1.55	....	....	.14	....	....	....	....	....	....	....	.90	....	....	....	....	....	.26	T.	....	....	....	....	....	3.11
Indian Mills	Mullica	....	....	....	....	....	....	....	1.71	....	....	.17	T.	....	....	....	....	....	....	.35	....	....	....	....	....	.12	....	....	....	....	....	....	2.35
Lakewood	Metedeconk	....	.06	....	....	....	....	.06	1.58	....	....	.06	T.	....	....	....	....	....	....	.34	....	....	....	....	....	.30	T	T.	....	....	T.	....	2.40
Moorestown ‖	Delaware	....	.03	....	....	....	....	....	1.45	T.	....	....	.22	....	....	....	....	....	....	.44	....	....	....	....	....	.19	T.	....	....	....	....	....	2.33
Northfield	Coast	....	.20	....	....	....	....	.05	.83	....	....	.08	.03	....	....	....	....	....	....	....	....	....	....	....	....	.02	....	....	....	....	....	....	1.21
Pemberton	....	....	.03	T.	....	....	....	.03	1.43	....	....	.08	.06	....	....	....	....	....	....	.25	....	....	....	....	....	.07	T.	....	....	....	T.	....	1.95
Pleasantville ‖	Coast	....	.25	....	....	....	....	....	1.25	....	....	....	*	.20	....	....	....	....	....	T.	....	....	....	....	....	.07	....	....	....	T.	....	....	1.77
Runyon	Coast	....	....	....	....	....	....	....	1.52	....	....	.14	....	....	....	....	....	....	....	.58	....	....	....	....	....	.44	....	....	....	....	....	....	2.68
Trenton***	Delaware	.01	.06	....	T.	....	....	.35	1.02	T.	....	.27	T.	....	....	....	....	....	.48	.20	....	....	....	....	.01	.23	T.	T.	T.	....	.03	....	2.66
Trenton No. 2 ‖	Delaware	....	.08	T.	....	....	....	....	1.38	.18	....	....	.28	T.	....	....	....	....	....	.79	....	....	....	....	....	.22	.02	T.	T.	....	....	.03	2.98
Tuckerton	Coast	....	.20	....	....	....	....	....	1.03	....	....	....	.22	....	....	....	....	....	....	.01	....	....	....	....	....	.33	....	....	....	....	.12	....	1.91
Phila., Pa***	Delaware	....	.03	T.	....	....	....	.53	1.12	....	....	.17	T.	....	....	....	....	....	.47	.15	....	....	....	....	....	.09	.02	....	....	....	....	....	2.58
The Sea Coast.																																	
Asbury Park	Coast	....	T.	....	....	....	....	.16	.15	....	....	.13	T.	....	....	....	....	....	....	....	....	....	....	....	T.	T.	T.	....	....	....	T.	....	0.44
Atlantic City***	...do	.15	.12	....	....	....	....	.30	.55	....	....	.11	.06	....	....	....	....	....	T.	T.	....	....	....	....	....	.11	T.	T.	....	T.	T	....	1.30
Cape May City	...do	.11	.05	....	....	....	....	.23	.83	....	....	.10	T.	....	....	....	....	....	....	T.	....	....	....	....	....	.03	T.	....	....	.06	.01	T.	1.42
Long Branch**	...do.	.22	.17	....	T.	....	....	.76	.87	....	....	.09	T.	....	....	....	....	....	.09	.50	....	....	....	....	.08	.50	T.	T.	....	....	.03	....	3.31
Sandy Hook***	...do	.01	.04	....	....	....	....	.22	.51	T.	....	.10	.02	....	....	....	....	....	.40	19.	....	....	....	....	....	.17	T.	T.	....	....	.02	....	1.68

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.83	30.52	15	29.10	8	17.1	62	e.	8	70	55	64	66
Long Branch	29.82	30.50	15	28.96	8	......	......	......	......	67	54	61	......
Moorestown	......	......	......	......	......	......	......	......	......	76	53	62	......
New York, N. Y	29.80	30.50	15	28.97	8	18.3	55	nw.	3	62	53	55	72
Philadelphia, Pa	29.84	30.56	15	29.07	8	14.4	39	sw.	25	69	50	58	68
Ridgefield	29.80	30.50	15	28.96	8	......	......	......	......	......	......	......	......
Sandy Hook	29.78	30.51	15	28.97	8	16 0	44	ne.	8	71	59	67	64
Trenton	29.81	30.53	15	29.02	8	12.0	38	nw.	2	68	46	55	69
Verona	......	......	......	......	......	......	......	......	......	......	......	......	......

Daily Temperatures for March, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	45	43	33	34	51	59	50	45	55	65	54	44	63	60	50	53	73	65	55	55	50	37	51	62	66	60	....	45	52	56	52	52.8[a]
	Minimum	20	32	16	19	17	25	25	38	34	30	30	29	38	27	18	24	34	41	32	29	34	18	23	24	45	29	....	27	25	25	26	27.8[a]
Charlotteburg	Maximum	42	42	38	31	47	53	52	44	49	59	58	50	60	60	47	49	58	58	48	53	52	36	44	55	52	53	36	42	49	55	55	49.3
	Minimum	13	32	13	17	9	22	19	36	32	34	26	29	27	25	19	24	29	35	29	29	32	14	22	17	38	36	27	28	20	27	28	25.4
Dover	Maximum	43	41	....	34	47	53	40	45	51	58	48	43	61	....	48	50	69	52	55	53	44	36	48	58	55	51	36	44	50	55	49	48.8[b]
	Minimum	18	25	14	17	12	19	24	36	33	33	29	29	29	26	20	27	31	35	30	29	21	16	22	20	42	31	28	28	34	26	28	26.2
Layton	Maximum	43	40	28	33	49	56	45	43	51	62	49	44	63	52	47	59	72	62	49	65	46	34	31	59	47	54	38	44	39	52	46	48.5
	Minimum	15	24	14	13	11	18	22	37	32	27	26	27	25	26	16	20	28	41	29	29	20	15	21	20	39	30	27	27	21	21	25	24.1
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	43	42	31	32	48	55	45	44	51	51	52	42	61	59	58	52	50	52	56	54	47	34	46	58	57	54	35	42	52	55	47	48.5
	Minimum	20	28	13	16	16	27	28	34	32	32	32	30	27	25	29	30	32	30	28	28	29	9	20	25	40	30	25	26	23	27	27	26.4
Phillipsburg	Maximum	44	41	30	33	49	55	43	46	55	58	42	44	62	47	48	55	71	62	59	54	46	40	50	60	66	56	38	46	52	55	51	50.3
	Minimum	24	26	18	21	20	27	28	40	36	33	33	32	31	29	21	26	34	41	34	30	32	20	24	40	46	32	31	30	26	27	30	29.7
Sussex	Maximum	43	42	32	32	49	54	50	43	50	62	....	45	62	61	47	47	70	64	49	56	52	35	46	59	50	53	39	44	49	54	52	49.7[a]
	Minimum	16	31	15	12	13	20	26	37	33	....	26	29	28	26	17	23	29	42	30	30	32	15	22	20	40	35	28	28	23	22	26	25.8[a]
The Red Sandstone Plain.																																	
Bayonne	Maximum	46	44	37	36	47	57	50	48	54	57	50	44	64	56	51	45	....	51	54	48	45	40	42	50	56	50	40	46	49	52	48	48.6[a]
	Minimum	38	30	16	22	26	38	38	38	40	39	39	35	....	42	24	34	24	36	34	30	30	17	28	34	43	35	32	32	34	36	32	32.5[a]
Boonton§§	Maximum	44	41	29	33	49	57	45	47	52	57	49	43	60	41	47	49	66	62	44	52	41	36	47	57	55	46	39	45	50	52	49	47.5
	Minimum	18	23	15	18	12	19	23	34	34	34	27	29	28	27	20	24	29	31	30	30	34	17	19	19	28	39	30	29	22	22	28	25.5
Elizabeth	Maximum	49	46	35	38	53	54	53	46	56	63	58	49	65	63	51	53	61	52	53	58	52	40	50	56	57	53	42	49	55	55	53	52.2
	Minimum	22	33	16	20	19	26	28	37	37	31	33	32	30	29	20	27	34	38	33	30	37	18	24	25	44	38	31	30	28	28	34	29.4
Flemington	Maximum	43	44	35	38	50	54	53	46	58	60	58	47	66	65	54	57	75	68	56	57	51	43	54	63	68	62	41	52	57	60	56	54.5
	Minimum	21	35	15	20	18	25	27	37	35	33	31	30	29	28	20	25	31	35	33	29	37	18	23	23	44	36	30	30	25	26	30	28.4
Jersey City	Maximum	46	45	29	35	47	56	46	48	54	58	51	44	63	47	49	46	58	55	55	50	43	38	48	52	58	54	39	45	50	51	51	48.7
	Minimum	30	32	17	21	24	36	38	39	37	36	35	34	33	30	23	32	38	39	33	32	30	18	24	32	44	36	32	31	34	35	33	31.9
Lambertville	Maximum	45	41	31	31	47	52	42	45	53	55	49	42	63	58	45	54	71	68	62	52	46	38	47	60	68	56	46	46	50	54	48	50.5
	Minimum	23	31	16	18	22	29	32	37	34	25	32	32	29	27	19	26	33	36	32	28	36	17	21	27	43	35	29	29	29	31	29	28.6
Little Falls§§	Maximum	47	43	40	35	50	58	45	47	55	60	50	47	65	43	51	49	62	52	47	55	43	39	50	55	55	50	40	47	53	56	52	49.4
	Minimum	20	31	17	20	16	24	26	38	36	31	30	33	32	29	22	27	32	37	32	30	35	18	19	22	42	41	31	29	25	25	30	28.4
New Brunswick	Maximum	47	46	34	33	50	52	49	47	55	57	54	49	65	63	46	53	73	49	58	54	51	38	48	60	64	55	45	47	50	54	52	51.5
	Minimum	22	33	18	20	20	27	27	37	36	34	33	33	30	29	22	27	33	36	34	30	36	19	24	26	43	36	31	30	29	30	29	29.5
Paterson	Maximum	47	44	49	34	51	56	49	47	51	60	54	47	64	60	49	49	60	51	49	50	51	39	50	55	57	55	40	48	54	56	52	50.9
	Minimum	25	36	18	21	22	28	31	38	37	36	34	34	33	31	24	30	38	38	34	32	35	20	25	28	43	37	32	31	31	30	33	31.1
Plainfield	Maximum	47	45	29	34	50	54	46	48	54	59	51	44	64	48	49	46	69	55	54	50	43	39	48	54	58	54	40	46	51	51	51	49.4
	Minimum	20	33	17	20	15	21	26	37	39	34	28	32	32	30	21	25	32	35	33	29	30	17	24	22	42	37	31	28	25	25	32	28.1
Ridgefield	Maximum	46	40	28	32	47	54	40	44	51	59	49	45	63	42	48	46	55	49	46	53	43	37	50	54	58	51	39	46	53	54	49	47.5
	Minimum	25	22	17	20	21	27	28	35	35	34	34	32	30	25	20	28	33	36	32	30	20	18	23	26	44	32	31	30	29	28	31	28.3
Somerville	Maximum	....	....	....	....	....	54	41	46	54	58	52	46	64	55	48	55	74	58	56	55	49	40	51	63	66	56	43	50	55	57	54	53.8[c]
	Minimum	20	32	17	19	15	23	24	38	35	32	31	31	28	27	18	24	30	34	33	29	33	17	23	21	44	36	31	28	24	23	28	27.4
South Orange	Maximum	47	44	32	34	51	55	54	45	55	60	56	48	65	64	50	43	62	53	52	55	54	38	51	54	55	51	40	47	48	58	52	50.7
	Minimum	20	31	16	18	17	25	26	36	36	33	29	30	28	28	18	32	28	37	32	29	35	17	23	23	43	37	31	29	27	27	32	28.2
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	45	45	29	35	46	56	46	47	52	56	50	43	62	46	48	45	55	54	55	50	43	36	48	49	57	54	38	45	50	51	50	47.9
	Minimum	31	24	17	21	25	38	39	39	37	37	37	34	33	29	23	33	39	40	33	32	23	18	24	33	45	33	32	31	35	36	33	31.7
The Southern Interior.																																	
Belleplain	Maximum	48	45	35	36	...	60	48	50	56	60	55	50	66	61	43	55	75	72	62	54	56	45	48	53	70	53	50	51	52	58	52	54.0[a]
	Minimum	13	33	19	12	12	....	28	42	38	29	34	33	23	35	19	17	34	45	37	25	37	18	18	19	40	38	32	43	30	33	29	28.8[a]
Burlington	Maximum	48	46	36	34	51	56	53	48	55	58	56	45	65	64	45	56	74	73	69	53	53	45	48	63	69	62	44	48	58	56	54	54.4
	Minimum	31	36	20	22	18	27	31	40	33	35	33	35	31	31	26	31	40	40	36	33	37	20	25	36	46	35	33	34	29	37	33	32.1
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	48	44	35	34	50	56	50	49	56	58	54	48	64	60	47	57	75	72	64	56	50	40	49	62	67	56	44	48	53	56	50	53.3
	Minimum	24	35	17	20	18	24	26	38	36	35	30	32	30	28	19	28	30	36	33	18	36	17	23	27	44	34	31	30	27	33	28	28.6
Indian Mills	Maximum	50	45	35	33	51	61	53	47	56	60	56	48	68	62	47	58	76	78	66	55	50	40	47	61	68	56	46	51	52	57	51	54.3
	Minimum	20	35	18	14	14	24	26	41	38	29	33	31	28	32	20	22	30	41	36	25	35	18	22	22	47	36	32	31	28	29	29	28.6
Lakewood	Maximum	48	44	33	33	49	52	42	51	55	58	52	47	64	61	45	53	68	66	61	52	49	39	45	55	61	54	44	49	50	56	51	51.2
	Minimum	20	33	19	17	16	24	26	38	38	31	30	34	31	31	21	25	31	38	36	29	39	19	23	23	43	38	33	32	29	32	32	29.4
Moorestown	Maximum	48	43	29	34	50	58	46	48	56	60	52	46	66	43	46	55	75	73	58	54	50	38	48	61	69	50	44	50	53	57	51	52.0
	Minimum	25	28	19	22	20	27	29	40	37	36	34	34	31	29	23	27	33	39	35	30	26	19	24	28	46	32	33	32	31	33	32	30.1
Pemberton	Maximum	50	46	36	33	51	59	53	49	55	58	56	46	64	62	46	55	74	74	67	53	52	45	48	61	67	59	45	49	53	57	50	54.0
	Minimum	25	35	19	21	20	26	27	41	38	34	36	31	40	32	23	25	33	40	36	31	35	20	25	26	47	36	33	33	31	31	31	30.7
Pleasantville§§	Maximum	46	45	26	37	45	52	46	48	54	59	47	48	66	44	42	50	76	63	48	52	51	....	47	51	61	48	47	51	47	51	51	50.0[a]
	Minimum	18	32	19	12	13	23	25	41	38	30	39	33	29	35	21	23	32	44	35	20	36	20	19	....	44	43	35	28	30	30	28	29.3[a]
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	49	41	29	32	51	54	44	48	54	57	54	46	64	46	47	53	73	71	58	53	46	37	47	60	67	51	43	47	51	54	49	50.8
	Minimum	29	27	18	21	24	33	31	38	37	37	36	35	33	29	23	32	37	39	35	32	24	19	24	32	46	32	33	32	35	35	33	31.3
Tuckerton	Maximum	48	47	39	35	47	54	52	48	55	61	60	48	68	65	48	52	74	70	58	55	53	54	48	55	59	65	45	52	50	52	53	53.5
	Minimum	21	38	18	17	18	28	32	40	36	29	35	32	28	31	18	24	34	40	35	25	36	18	20	25	43	40	30	28	30	30	30	29.8
Philadelphia, Pa	Maximum	47	44	30	35	52	60	50	49	56	59	52	47	65	51	48	55	74	70	59	59	49	38	49	61	69	52	44	50	53	56	50	52.5
	Minimum	33	28	21	25	29	38	36	42	38	40	38	37	35	33	28	37	42	44	39	36	29	21	27	35	51	34	35	36	40	39	37	34.9
The Sea Coast.																																	
Asbury Park	Maximum	43	44	34	35	42	50	41	50	54	59	47	48	65	55	44	46	49	54	55	44	46	47	46	50	51	51	45	48	46	54	48	48.1
	Minimum	29	31	18	21	24	32	36	38	37	35	40	34	29	31	24	31	37	40	35	31	32	19	24	32	44	35	25	33	37	36	33	31.7
Atlantic City	Maximum	45	46	30	35	44	50	44	50	55	56	49	48	56	52	40	46	65	58	60	54	55	39	50	50	53	53	47	50	44	50	52	49.2
	Minimum	36	29	20	23	31	36	37	42	40	36	38	36	34	41	25	30	41	47	37	35	30	21	24	39	45	36	35	35	39	40	35	34.3
Cape May City	Maximum	46	46	32	36	46	53	49	50	52	60	48	50	63	53	42	50	69	60	58	54	55	38	45	53	58	48	52	52	47	54	50	50.6
	Minimum	34	30	24	23	23	30	36	42	40	37	37	37	36	32	25	30	41	48	38	36	38	22	28	38	46	36	35	36	35	39	36	34.5
Long Branch	Maximum	46	44	31	36	47	48	40	50	55	58	49	47	63	46	48	47	50	56	56	52	44	44	47	50	50	51	41	45	40	52	50	47.8
	Minimum	41	31	22	23	24	30	30	40	46	36	38	35	34	33	25	30	37	40	36	33	26	23	35	25	40	31	32	30	30	32	30	32.2
Sandy Hook	Maximum	43	42	27	33	43	49	40	46	50	54	47	44	58	44	44	43	47	54	54	50	44	37	47	46	53	50	42	46	50	51	49	46.0
	Minimum	32	27	19	24	27	33	36	38	39	37	37	35	35	31	26	34	38	39	35	34	25	21	27	33	44	34	34	33	36	37	36	32.8

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

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CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. APRIL, 1930. No. 4

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

While the average temperature for the month was not unusual in its departure from the normal, the highest temperatures were notable in that they did not reach the high points registered in all previous years. No 80-degree maximum was reported, whereas all former years have experienced temperatures well up in the eighties and low nineties at some time during the month. This maximum was also lower than had been experienced in the preceding months of either February or March. The highest temperatures were reached mostly on the 14th in the north portion and on the 14th and 30th in the southern sections. The lowest occurred on the 1st, 3d and 24th, and were below the freezing point in all cases. On the 24th unusually low temperatures for that late in the season were recorded. At nearly all stations a minimum of from 22 degrees to 29 degrees was registered and these temperatures (at stations having records of from thirty to fifty years) were the lowest on record for that late in the Spring.

In respect to rainfall the month was quite dry, the average for the State being the second least during the past thirty years and the sixth least in a record of forty-six years. However, the smallness of the monthly average was due to the lightness of the individual rains, as the number of days with rain was practically up to the normal. Rain periods were the 2d, 6th-7th, 13th-14th, 16th up to 19th, inclusive, and the 22d. From the 22d on to the end of the month there was no appreciable rain. There were traces of snow at scattered stations over the State, occuring mostly on the 8th and 23d. At Culvers Lake, Sussex Co., one-tenth of an inch was recorded.

No damage by wind or hail was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 47.6°, which was 1.7° below normal. The highest temperature was 79° at Little Falls on the 14th, and the lowest, 18°, at Belleplain on the 3d. The greatest daily range of temperature was 44° at five stations on various days. The highest monthly mean temperature was 9.8° at Bridgeton and Paterson, and the lowest, 44.6° at Layton.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +2.0°; Red Sandstone Plain, +1.9°; Southern Interior, +2.1°; Sea Coast, +2.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 2.34 inches, which was 1. 31 inches below normal. The average total snowfall at twenty selected stations was a trace. The greatest monthly precipitation was 3.72 inches, at Charlotteburg, and the least, 0.50 inches at Asbury Park. The greatest amount of precipitation in any 24 consecutive hours was 2.11 inches at Charlotteburg on the 6-7th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 9, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands. —3.92 inches; Red Sandstone Plain, —4.46 inches; Southern Interior, —3.32 inches; Sea Coast, —5.04 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 12 miles per hour, which was normal The highest velocity, sustained for 5 consecutive minutes, was 60 miles per hour from the southeast at Atlantic City on the 6th.

MISCELLANEOUS.

The per cent of possible sunshine was 58, or 1 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.04 inches, which was 0.04 inch above normal. The highest reading was 30.60 inches on the 17th, at Ridgefield, and the lowest was 29.11 inches on the 7th at Sandy Hook and Verona.

The mean stage of the Delaware River at Phillipsburg was 4.2 feet, and the highest stage was 7.0 feet on the 8th. The mean stage at Trenton was 2.5 feet, or 1.4 feet below normal. The highest stage was 3.8 feet on the 10th.

A little light hail occurred at Ridgefield on the 7th. Thunderstorms occurred on the 7th, 12th, 13th, 14th and 16th. An aurora was observed at 2:00 a. m. on the 19th at Layton. Dense fog was reported at the majority of the stations on the 17th, 18th and 19th, and also on the 13th and 14th along portions of the coast. Light or heavy frost occurred on numerous days throughout the month. Killing frosts were noted over the greater part of the northern half of the State as late as the 29th. The low temperatures of the 23d and 24th were attended by frost at only a few scattered stations in northern counties the wind being too high for frost formation.

COMPARATIVE DATA FOR APRIL

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	48.4	88	26	2.79	2.86	0.89					
1886	50.6	86	**27**	3.40	5.48	1.86	......	......	......	......	......
1887	47.3	87	16	2.70	3.77	0.91	......	......	......	12	7
1888	47.9	92	22	3.28	4.68	1.89	......	......	......	6	9
1889	51.2	83	25	5.32	7.25	2.92	......	......	......	14	12
1890	50.4	86	21	2.65	4.58	1.89	......	......	......	7	8
1891	52.0	88	20	2.19	3.80	1.39	......	13	11	6	8
1892	49.3	87	19	2.49	4.41	1.05	......	9	13	8	8
1893	49.2	82	19	5.21	7.12	2.97	......	9	10	12	11
1894	50.3	88	10	3.09	4.86	1.71	......	12	9	9	9
1895	49.1	89	19	4.88	7.75	3.47	T.	11	7	12	10
1896	52.4	**98**	12	*1.35*	*2.30*	0.64	3.1	13	10	7	7
1897	50.4	89	19	3.79	6.98	2.17	T.	14	11	5	9
1898	47.8	81	13	3.74	4.94	2.17	2.9	8	11	11	11
1899	49.9	88	18	1.73	3.25	*0.48*	T.	16	10	4	4
1900	50.8	82	18	2.29	3.03	1.59	T.	14	9	7	6
1901	48.3	89	23	6.31	**10.22**	3.46	0	8	7	15	12
1902	50.2	93	20	3.62	5.99	2.45	0	10	11	9	9
1903	50.9	92	18	3.97	7.03	2.40	0	13	7	10	9
1904	46.7	85	16	3.42	4.71	2.00	0.1	9	12	9	10
1905	49.9	84	18	2.88	4.03	1.53	0.1	12	11	7	10
1906	51.2	87	17	3.64	6.42	1.17	T.	15	10	5	8
1907	*45.2*	83	19	3.78	8.67	2.06	4.8	11	9	10	11
1908	51.2	93	13	2.72	3.86	1.42	T.	14	9	7	11
1909	50.2	88	17	5.97	8.90	3.84	0.8	10	11	9	13
1910	53.5	88	20	5.34	7.56	3.43	0	9	11	10	12
1911	47.4	88	14	4.11	5.58	2.87	2.6	10	10	10	11
1912	50.4	82	18	3.56	6.02	1.81	0	9	10	11	14
1913	52.1	89	19	5.78	8.53	4.14	T.	14	7	9	11
1914	48.4	89	16	3.67	4.78	2.35	0	13	10	7	11
1915	54.4	96	20	2.71	4.13	1.28	**11.5**	14	10	6	9
1916	48.2	85	21	3.32	6.14	0.90	4.4	10	9	11	13
1917	48.8	88	21	2.39	3.54	1.19	4.7	15	8	7	9
1918	49.8	81	22	4.05	5.79	2.88	2.6	11	8	11	12
1919	49.3	85	15	3.06	4.79	2.20	T.	13	7	10	10
1920	48.0	85	13	4.50	6.06	2.90	T.	12	9	9	13
1921	**56.3**	87	20	3.57	5.20	1.86	0.4	13	6	11	11
1922	51.0	89	18	2.55	4.12	1.57	T.	15	7	8	10
1923	50.0	91	***3***	3.55	6.59	2.27	0.5	16	6	8	9
1924	48.0	81	18	6.15	9.23	**4.74**	6.6	15	6	9	11
1925	51.4	88	15	2.40	3.35	1.31	0	15	7	8	9
1926	46.4	87	14	2.05	2.97	1.39	T.	13	10	7	8
1927	47.5	93	17	2.42	3.97	1.00	0.3	14	7	9	9
1928	47.4	85	16	5.26	7.16	3.82	0.9	12	8	10	12
1929	51.1	94	25	**6.43**	8.74	4.63	T.	10	5	15	15
1930	47.6	*79*	18	2.34	3.72	0.50	T.	13	7	10	9

W. B. O.Philadelphia-5-22-30-1050.

Climatological Data for April, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	47.8	−2.0	76	14	23	3	39	3.28	−0.38	1.80	0	8	23	3	4	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	45.9	−0.9	75	14†	19	1	40	3.72	−0.60	2.11	0	10	11	4	15	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	......	......	......	24	24	....	2.75	−1.07	1.12	0.1	10	18	2	10	e.	Brice E. Riker.
Dover	Morris	600	46	46.2	−1.2	76	14	22	25	40	3.06	−0.70	1.52	T.	9	5	17	8	......	William C. Harris
Layton	Sussex	480	29	44.6	−2.6	76	14	20	1†	44	2.69	−0.92	1.40	T.	9	9	7	14	nw.	A. M. Depue.
Long Valley	Morris	520	....	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	46	46.4[a]	−1.6	75[a]	14	23[a]	3†	36[a]	2.97	−0.40	1.30	T	8	8	9	13	nw.	Irving J. Kern.
Phillipsburg	Warren	363	47	48.2	−1.7	75	14	25	3	39	2.63	−0.63	0.93	0	8	20	4	6	......	Town Engineer.
Sussex	Sussex	442	35	45.6[b]	−3.0	75[b]	14	21[b]	1†	44[b]	2.20	−1.24	0.76	T.	10	....	....	....	nw.	A. J. W. Mowatt
Means and extremes	......	......	....	46.4	−1.9	76	14	19	1	44	2.91	−0.74	2.11	T.	9	13	7	10	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	46.6	−2.9	69	14	27	23	29	2.71	−1.68	0.90	T.	10	16	8	6	w.	William Mann.
Boonton	Morris	400	§40	45.4	......	75	14	21	1†	41	2.41	−1.58	1.03	......	9	14	3	13	ne.	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	....	3.23	−0.87	1.12	0	10	17	3	10	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	49.6	−1.2	75	27	25	3	40	2.63	−1.05	1.29	T.	9	18	2	10	se.	Union County Park Com.
Flemington	Hunterdon	140	§44	48.9	−1.5	78	14	21	3	43	2.39	−1.13	1.17	T.	9	19	6	5	nw.	Hiram E. Deats.
Jersey City	Hudson	10	32	48.4	−1.6	75	14	29	24	28	2.29	−1.87	0.70	T	8	11	14	5	nw.	S. K. Pearson, Jr.
Lambertville	Hunterdon	430	43	46.8	......	72	30	26	3	34	3.43	−0.15	1.03	T.	8	14	5	11	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	47.7	−2.2	79	14	26	1†	41	3.25	−0.87	1.99	T.	10	15	4	11	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	48.2	−1.4	73	14†	26	3	37	2.18	−1.56	0.93	T.	9	12	13	5	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	12	......	......	......	......	......	......	....	2.73	......	1.33	......	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	49.8	−0.7	78	14	29	24	34	3.04	−0.52	1.83	T.	9	17	3	10	sw.	Marion T. Probert.
Plainfield	Union	120	42	47.5	−2.1	75	14	24	3	40	2.39	−1.51	1.15	T.	9	8	15	7	nw.	E. D. Pearson.
Ridgefield	Bergen	80	13	47.5	......	77	14	27	24	35	2.58	......	1.48	T.	8	8	10	12	nw.	George P. Kirsten.
Somerville	Somerset	70	47	47.4	−2.1	75	14	19	3	44	2.05	−1.44	0.94	T.	9	9	8	13	nw.	Julius Gerlich.
South Orange	Essex	200	58	47.8	−0.7	78	14	24	3	38	2.71	−0.86	1.40	0	9	9	9	12	w.	Everett W. Bird.
Verona††	Essex	490	4	46.0	......	74	14	26	24	29	2.78	......	1.56	0	11	8	13	9	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	2.92	......	1.28	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	60	47.6	−1.8	73	14	29	24	22	2.01	−1.22	0.76	T.	11	6	12	12	nw	U. S. Weather Bureau.
Means and extremes	......	......	....	47.8	−1.6	79	14	19	3	44	2.68	−1.16	1.99	T.	9	13	8	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	48.0[a]	−2.6	77[a]	14	18[a]	3	42[a]	1.84	−1.81	0.60	T.	8	9	6	15	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	47	49.8	−2.9	75	11	30	2†	33	2.27	−1.25	0.97	0	8	....	....	....	......	Bennett K. Matlack
Burlington	Burlington	12	§44	49.6	−2.2	74	30	25	3	33	1.75	−1.95	0.82	0	8	11	7	12	nw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	36	47.9	−2.6	74	14	22	3	40	2.20	−1.71	0.88	0	9	14	5	11	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	48.6	−1.7	77	30	22	3	44	1.72	−1.71	1.06	0	8	8	15	7	nw.	James M. Armstrong.
Lakewood	Ocean	54	26	47.7	−1.7	73	14	23	3	37	2.35	−1.32	1.14	T.	9	11	7	12	nw.	R. W. Holman.
Moorestown	Burlington	......	67	48.4	−2.0	73	14†	27	3	35	1.43	−1.86	0.66	0	8	10	7	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	......	......	......	......	......	....	1.99	−1.47	0.66	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	49.4	......	75	30	25	3	39	1.52	......	0.80	0	9	10	8	12	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	45.4	......	68	14†	21	3	34	1.96	−1.39	0.49	......	9	20	1	9	......	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	47.6[a]	......	74[a]	30	24[a]	3	44[a]	1.90	......	0.68	......	8	17	9	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	48.4	−1.4	72	30	29	24	29	1.74	−1.20	1.00	T.	10	8	9	13	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	5	......	......	......	......	......	......	....	1.97	......	1.07	T.	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	47.6	−1.7	71	14	28	3†	34	1.59	−2.15	0.57	0	7	14	4	12	nw.	John H. Brown.
Philadelphia, Pa	......	117	59	51.2	−0.9	74	14	33	24	26	1.64	−1.41	1.07	T.	11	6	12	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	...	48.2	−2.1	77	14†	18	3	44	1.87	−1.62	1.14	T.	8	12	7	11	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	47.3	−1.2	71	27	29	24	28	0.50	−3.19	0.41	0	5	20	5	5	nw.	Information Bureau.
Atlantic City	Atlantic	16	57	47.8	0.0	67	14	32	24	23	2.00	−0.99	0.73	0	9	8	10	12	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	48.9	+0.5	74	14	31	3	26	1.54	−1.45	0.57	T.	8	10	10	10	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	45.6	−2.5	72	27	28	3†	34	2.05	−2.50	0.46	0	11	10	8	12	s.	William D. Martin.
Sandy Hook	Monmouth	22	32	46.9	−0.1	70	14	32	24	22	2.08	−1.54	1.03	0	11	6	12	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	47.3	−0.7	74	14	28	3†	34	1.63	−1.93	1.03	T.	9	11	9	10	nw.	
For the State	......	......	....	47.6	−1.7	79	14	18	3	44	2.34	−1.31	2.11	T.	9	13	7	10	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for April, 1930

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
elvidere	Delaware		.09				.10	1.80						.38			.51	.27	.11	.02													3.28
harlotteburg	Passaic		.12				*	2.11	T.					.14	.17		.51	.39	.11	.05			.12										3.72
ulvers Lake	Delaware		.02				.02	1.12	T.				T.	.25	.22		.46	.49	.05	.04			.08	T.	T.								2.75
over	Passaic		.10				*	1.52	T					.37			.40	.11	.27	.15			.14										3.06
ayton	Delaware						.02	1.40	.03	T.				.31	.01		.37	.49	.03	T.			.03	T.	T.								2.69
ong Valley																																	
ewton	Delaware		.08				T.	1.30	T.			T.	.40		.03		.65	.41	.06	.04				T.									2.97
hillipsburg	...do		T.				.51	.93					T.	.32		T.	.62	.10	.07			.03	.05						T.				2.63
ussex	Hudson		.07					.76	.04				.03	.14	.19		.31	.47	.05			.14											2.20
The Red Sandstone Plain.																																	
ayonne	Coast		T.				.90	.12							.20	.20	.44	.20	.10	.20		.15	.20	T.			T.						2.71
oonton ‖‖	Passaic		T.					1.03	.12				T.	.15	.12		.27	.22	.22	.12	T.		.16	T.					T.				2.41
hatham ‖	...do		.02		T.			1.12	.31				T.	.23	.16		.48	.29	.18	.11			.33										3.23
lizabeth	Coast		T.				.03	1.26	T.				T.	.19	.20		.35	.20	.10	.10			.20	T.									2.63
lemington	Raritan		T.				.03	1.14						.14	.15		.43	.16	.18	.05			.11		T.				T.				2.39
ersey City	Coast		T.	T.			.20	.70	T.				T.	.25			.40	.27	.16	.07			.24						T.				2.29
ambertville	Delaware						.20	1.03						.21	.32		.63	.73	.21	.10									T.				3.43
ittle Falls. ‖‖	Passaic		.05					1.80	.19					.12	.10		.33	.20	.17	.11			.18	T.									3.25
ew Brunswick	Raritan						.01	.93	T.					.13	.16		.38	.25	.11	.10			.11	T.					T.				2.18
ew Milford.**	Hackensack		.04				1.33	.13					.08	.13		.33	.11	.27	.12			.19											2.73
aterson	Passaic		.03				T.	1.83					T.	*	.15		.38	.30	.12	.05			.18	T.					T.				3.04
ainfield	Raritan		.03	T.			.11	1.15	T.					.30			.20	.15	.11	.29			.05	T.									2.39
idgefield**	Hackensack		.03				.05	1.43	T.				T.	.20			.33	.22		.09			.23	T.									2.58
omerville	Raritan						.09	.85	T.					.24	.04		.41	.21	.05	.06			.10						T.				2.05
outh Orange	Rahway		.04				.09	1.40						.15	.15		.55	.16	.12	.05													2.71
erona**	Passaic		.03				.64	.92					.02	.21			.38	.26	.11	.03		.04	.14										2.78
oodcliff Lake**	Hackensack		.04				1.28	.16					.13	.15		.42	.12	.31	.11			.20											2.92
ew York, N. Y***	Coast		T.	T.			.35	.41	T.				.02	.17		.03	.35	.24	.19	.02		.05	.18						T.				2.01
The Southern Interior.																																	
elleplain	Tuckahoe			.45	T.		.06	.60	T.							T.	.22	.14	.20	.14			.03		T.								1.84
ridgeton	Coast			.29			.97	.10								.28	.16	.15	.29			.03											2.27
urlington	Delaware			T.			.03	.82						T.	.01		.54	.07	.12	.08			.08										1.75
ayton	Delaware																																
ightstown	Raritan						.06	.82						.24	.20		.37	.10	.20	.10			.11										2.20
dian Mills	Mullica			.14			.08	.98							T.	T.	.11	.08	.17	.11			.05										1.72
kewood	Metedeconk			T.			.06	1.08	T.					.12	.02	T.	.53	.04	.30	.10			.10	T.					T.				2.35
oorestown ‖‖	Delaware				T.			.66	.15						.01		.30	.03	.02	.21	T.		.05										1.43
orthfield	Coast			.43			.01	.54									.66	.06	.12	.12			.05										1.99
emberton				.02			.80	.09						.01	T		.28	.01	.14	.09			.08										1.52
easantville ‖‖	Coast				.49			.43	.18								.48	.05	.07	.16	.06		.04										1.96
nyon	Coast						.08	.60						.11	.13		.47	.32	.11	.08													1.90
enton***	Delaware		T.	T.			.56	.45	T.				T	.17	T.	.08	.24	.05	.05	.07		.03	.04	T.					T.				1.74
enton No. 2 ‖‖	Delaware		T.		T.			.91	.16	T.				.11	.07		.37	.04	.06	.15	.02		.08	T.	T.					T.			1.97
ckerton	Coast			.20			.02	.55									.42	.10	.05	.25													1.59
ila., Pa***	Delaware			.02			.90	.17	T.					.01	T.	.05	.25	.02	.05	.12		.02	.03						T.				1.64
The Sea Coast.																																	
bury Park	Coast						.37	.04						T.	T.	T.	.05	.01	.03	T.			T.					T.					0.50
lantic City***	...do			.45			.29	.15							T.	.01	.73	.07	.16	.11		T.	.03										2.00
pe May City	...do			.57	T.		.05	.56			T.			T.			.12	.04	.03	.16			.01		T.				T.				1.54
ng Branch**	...do						.46	.30					T.	.10		.26	.15	.27	.16	.22		.08	.03						.02				2.05
ndy Hook***	...do		T.				.52	.51	T.				.03	.17		.05	.26	.18	.12	.07		.04	.13						T.				2.08

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ ‖ Precip-
tion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	30.05	30.48	17	29.23	7	16.3	60	se.	6	73	64	72	55
ng Branch	30.04	30.53	17	29.15	7					70	66	63	
orestown										72	52	63	
w York, N. Y	30.03	30.59	17	29.14	7	14.9	57	w.	7	66	53	59	64
iladelphia, Pa	30.06	30.51	17	29.20	7	12.7	40	nw.	2	61	52	70	63
dgefield	30.03	30.60	17	29.14	7								
ndy Hook	30.02	30.53	17	29.11	7	13.6	46	sw.	7	70	59	69	57
enton	30.04	30.52	17	29.15	7	10.3	42	w.	7	66	46	57	61
rona		30.53	17	29.11	7	7.6	41	nw.	7	63	48	58	

Daily Temperatures for April, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	63	58	54	53	66	60	51	43	54	59	65	64	65	76	69	55	47	52	63	66	59	61	53	45	53	64	71	68	70	75	....	60.1
	Minimum	25	34	23	35	27	33	40	35	31	27	34	42	48	49	39	29	37	37	49	33	37	41	28	27	35	36	32	60	35	37	....	35.5
Charlotteburg	Maximum	58	54	54	50	64	63	50	50	48	61	62	59	59	75	75	56	49	52	62	60	60	57	53	41	50	59	68	67	64	71	....	58.4
	Minimum	19	34	25	31	29	26	39	37	29	29	40	40	42	48	35	37	34	33	47	35	30	37	26	22	33	33	28	44	27	33	....	33.4
Dover	Maximum	59	50	53	50	65	59	58	44	51	61	59	58	59	76	64	50	44	57	62	62	53	60	49	44	54	61	70	65	65	72	....	57.8
	Minimum	24	34	26	32	27	30	37	33	30	31	41	42	46	52	38	39	34	34	43	36	36	36	26	26	22	36	30	49	31	36	....	34.6
Layton	Maximum	60	53	55	50	65	60	59	40	49	62	57	59	64	76	63	53	50	53	69	61	52	56	40	40	50	61	70	66	67	72	....	57.4
	Minimum	20	32	20	33	22	27	21	31	29	20	36	38	44	47	29	36	35	35	45	29	31	40	26	21	34	36	26	47	27	33	....	31.7
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	61	55	52	49	63	61	53	40	58	66	59	65	....	75	66	52	49	52	62	61	61	57	40	41	54	59	70	69	67	74	....	58.4[a]
	Minimum	30	31	23	23	27	35	35	32	27	40	39	45	....	50	35	34	34	33	47	35	38	37	25	24	32	37	34	40	35	41	....	34.4[a]
Phillipsburg	Maximum	62	54	52	53	65	60	56	43	54	60	66	65	65	75	62	48	46	53	62	65	55	62	45	45	53	64	72	67	71	74	....	59.1
	Minimum	26	37	25	36	28	34	39	34	34	29	41	44	49	50	41	41	39	38	49	36	41	38	30	29	37	39	33	50	37	38	....	37.4
Sussex	Maximum	60	58	56	50	66	62	58	42	48	61	66	61	61	75	70	58	50	52	59	61	57	....	49	39	48	59	71	....	70	74	....	58.6[b]
	Minimum	21	33	21	32	23	27	39	31	30	24	38	40	42	48	35	36	35	35	50	32	33	....	27	22	34	37	27	....	29	35	....	32.7[b]
The Red Sandstone Plain.																																	
Bayonne	Maximum	57	54	57	52	53	54	57	53	43	42	45	42	44	69	62	58	54	52	60	64	61	59	55	40	53	57	68	64	63	63	....	55.2
	Minimum	38	36	36	34	34	44	44	33	31	32	33	30	32	40	45	42	41	32	42	44	40	45	27	30	36	40	45	46	44	44	....	38.0
Boonton§§	Maximum	60	48	52	51	62	61	56	41	50	61	63	54	61	75	61	50	53	54	63	62	54	60	41	43	52	60	69	66	64	70	....	57.2
	Minimum	21	32	21	28	27	27	44	35	30	25	37	40	41	47	35	38	36	34	38	46	35	35	28	27	29	39	28	37	30	31	....	33.5
Elizabeth	Maximum	65	59	54	55	65	62	65	51	51	67	62	59	65	70	66	51	48	53	68	66	66	67	59	50	54	67	75	70	63	72	....	61.5
	Minimum	28	38	25	33	29	33	42	37	32	28	43	45	46	49	44	42	38	37	48	38	42	44	30	27	35	37	35	51	37	36	....	37.6
Flemington	Maximum	63	60	50	55	68	63	60	53	56	62	64	59	65	78	72	53	46	54	64	69	60	65	56	49	55	68	74	66	71	75	....	61.8
	Minimum	25	36	21	34	25	39	41	37	32	25	39	42	45	51	40	39	38	36	50	33	39	42	28	27	33	36	31	50	33	34	....	36.0
Jersey City	Maximum	56	54	49	52	62	57	59	44	51	60	61	55	62	75	62	51	46	54	64	62	54	60	42	44	52	61	70	62	60	67	....	56.9
	Minimum	36	37	33	37	38	42	41	37	32	34	46	44	47	52	42	41	39	41	47	40	42	40	30	29	36	39	42	46	44	43	....	39.9
Lambertville	Maximum	62	52	46	52	63	63	58	41	52	60	62	58	64	71	61	45	42	54	60	62	55	59	42	44	52	61	70	60	66	72	....	57.0
	Minimum	31	31	26	35	29	36	39	33	31	28	41	41	44	50	40	39	36	37	44	37	40	38	28	27	34	37	40	48	39	39	....	36.6
Little Falls§§	Maximum	63	51	53	55	65	61	61	43	54	64	64	57	64	79	61	51	42	56	64	66	53	62	42	47	55	63	73	66	64	74	....	69.1
	Minimum	26	36	27	31	29	32	49	36	32	27	43	42	43	48	40	40	37	35	41	38	38	41	29	26	33	37	32	52	33	35	....	36.3
New Brunswick	Maximum	63	59	50	53	63	62	62	47	54	62	54	55	67	73	68	47	43	52	63	63	61	62	53	46	53	63	71	68	63	73	....	59.1
	Minimum	29	37	26	34	29	33	40	38	32	30	44	43	45	49	42	40	37	36	48	35	42	42	29	28	34	35	38	50	36	36	....	37.2
Paterson	Maximum	63	53	54	55	66	61	61	45	54	65	63	56	64	78	71	49	48	50	64	65	59	62	49	47	57	64	73	73	65	73	....	60.2
	Minimum	32	38	30	36	35	35	43	37	33	31	46	44	53	50	42	42	37	37	49	40	41	42	31	29	38	40	39	53	40	41	....	39.5
Plainfield	Maximum	56	54	49	53	64	63	61	45	51	62	62	55	65	75	62	52	46	54	64	62	55	61	43	44	52	64	72	62	61	72	....	58.0
	Minimum	25	36	24	37	27	38	42	37	32	26	43	43	45	50	41	41	39	40	49	37	39	41	29	28	34	38	32	50	33	35	....	37.0
Ridgefield	Maximum	61	50	50	54	62	60	62	42	52	62	60	52	61	77	58	59	43	50	63	64	51	62	42	45	56	62	72	65	68	70	....	57.8
	Minimum	32	32	28	32	32	36	39	32	31	29	44	42	45	49	40	40	37	38	47	44	41	34	29	27	35	37	37	51	37	40	....	37.2
Somerville	Maximum	63	55	50	55	67	65	63	46	56	63	63	59	67	75	61	46	45	53	63	66	56	64	46	51	56	67	73	62	67	73	....	59.9
	Minimum	22	38	19	33	23	31	41	37	31	24	41	41	44	49	42	41	37	38	50	34	37	34	27	25	34	33	30	44	31	33	....	34.8
South Orange	Maximum	63	61	51	54	65	64	63	48	53	64	62	61	64	78	64	49	45	53	64	65	51	62	61	44	52	60	68	68	60	73	....	59.7
	Minimum	26	36	24	34	30	30	30	36	31	27	41	43	44	50	42	41	36	36	36	40	38	42	29	26	35	38	33	51	34	35	....	35.8
Verona	Maximum	60	49	50	50	60	57	59	42	48	61	59	51	61	74	56	46	43	50	62	60	49	59	39	43	52	59	69	61	61	68	....	55.3
	Minimum	32	31	27	34	34	38	37	31	30	32	46	42	46	50	40	39	35	35	44	40	41	33	28	26	35	38	40	43	36	42	....	36.8
New York, N. Y.	Maximum	66	53	49	51	56	53	58	42	50	58	60	54	58	73	60	49	45	53	62	61	62	59	41	42	52	58	67	62	58	64	....	55.2
	Minimum	37	37	33	37	39	43	40	33	32	36	47	44	47	53	43	41	38	41	46	41	42	37	30	29	36	40	45	46	45	44	....	40.1
The Southern Interior.																																	
Belleplain	Maximum	61	54	49	53	60	59	63	50	56	58	75	70	61	77	70	....	42	65	62	64	59	66	59	51	53	63	70	66	63	72	....	61.1[a]
	Minimum	20	40	18	31	21	32	41	38	29	22	40	39	44	45	....	40	39	41	55	33	30	44	29	25	29	39	32	46	44	30	....	35.0[a]
Bridgeton	Maximum	63	53	49	49	60	62	62	45	55	58	75	70	65	70	60	45	48	60	60	64	62	65	47	49	55	62	70	71	68	72	....	59.8
	Minimum	40	30	35	31	40	45	40	33	30	44	43	48	41	48	41	40	41	47	37	39	43	32	30	33	40	40	47	46	40	51	....	39.8
Burlington	Maximum	64	62	52	54	61	64	61	52	54	60	65	61	69	72	72	51	48	55	57	63	60	61	44	43	53	61	71	67	68	74	....	60.0
	Minimum	31	39	25	34	31	37	46	42	33	28	42	43	53	51	44	43	41	40	43	46	42	44	32	31	36	36	38	40	41	45	....	39.2
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	64	56	49	54	65	63	60	46	53	61	64	58	72	74	67	47	44	56	63	64	62	64	54	45	56	64	72	68	65	67	....	59.9
	Minimum	27	37	22	33	25	35	40	38	32	25	42	40	42	47	41	40	38	37	51	34	36	41	29	28	34	38	37	39	34	36	....	35.9
Indian Mills	Maximum	64	57	49	52	65	62	62	50	54	64	72	66	73	74	68	49	46	61	61	64	59	66	55	49	52	63	74	63	67	77	....	61.3
	Minimum	25	40	22	33	25	33	43	40	30	24	42	41	40	46	41	41	40	40	67	32	32	44	30	26	32	30	31	42	43	33	....	35.9
Lakewood	Maximum	61	53	51	55	59	59	63	48	54	61	63	52	64	73	68	47	45	58	63	64	66	64	58	47	65	62	71	61	60	70	....	58.8
	Minimum	26	38	23	32	25	32	44	39	32	27	44	45	42	49	45	40	40	38	50	39	34	44	29	28	35	32	35	48	31	33	....	36.6
Moorestown	Maximum	63	53	47	53	63	63	60	45	54	60	68	62	71	73	60	46	43	57	63	63	68	64	45	48	54	63	72	63	66	73	....	59.1
	Minimum	32	36	27	37	29	35	42	35	33	28	42	41	44	48	43	41	40	40	44	38	38	39	31	30	36	35	39	48	42	38	....	37.7
Pemberton	Maximum	64	59	52	55	63	62	62	60	55	59	69	64	74	72	70	48	46	59	62	65	58	63	58	47	52	63	70	62	66	75	....	60.8
	Minimum	29	40	25	34	27	36	43	39	32	27	45	43	43	48	47	42	40	40	55	35	38	44	31	27	35	33	36	46	40	36	....	37.9
Pleasantville§§	Maximum	53	49	49	51	51	55	61	47	53	51	63	55	67	68	54	43	48	65	60	58	53	65	45	48	51	57	68	58	57	60	....	54.8
	Minimum	27	39	21	33	27	40	45	39	30	26	44	43	43	46	47	39	39	40	48	33	31	31	28	26	30	31	35	45	47	31	....	36.1
Runyon	Maximum	58	56	57	56	60	60	61	44	64	64	64	68	71	72	70	48	44	52	69	66	54	56	62	58	58	59	....	60	60	74	....	60.2[a]
	Minimum	32	28	24	26	29	30	34	38	29	32	38	44	48	42	44	36	38	42	46	46	40	36	32	28	26	32	34	....	29	30	....	34.9[a]
Trenton	Maximum	62	54	51	52	63	61	60	43	53	62	64	58	68	72	57	46	42	56	62	62	54	60	41	43	52	62	69	60	66	72	....	57.6
	Minimum	35	37	32	40	34	40	40	34	33	35	45	44	46	60	43	41	38	38	46	40	43	37	21	29	36	38	42	45	42	44	....	39.3
Tuckerton	Maximum	55	65	55	54	55	65	63	50	54	55	63	58	58	71	63	52	45	55	62	60	65	67	59	50	55	60	70	60	58	64	...	57.9
	Minimum	31	44	28	31	28	39	45	38	28	28	42	42	40	44	44	44	40	39	50	40	35	44	28	28	31	34	36	41	41	34	....	37.2
Philadelphia, Pa.	Maximum	64	55	46	53	61	62	58	45	56	68	70	66	66	74	63	49	46	58	63	65	60	62	45	47	54	63	68	66	69	71	....	59.4
	Minimum	38	41	38	42	41	42	44	37	36	41	46	47	50	51	46	44	42	41	49	44	46	43	36	33	38	42	45	54	47	48	....	43.0
The Sea Coast.																																	
Asbury Park	Maximum	54	52	49	64	65	55	62	46	51	54	63	60	55	70	62	48	45	50	59	60	48	62	49	48	55	58	71	62	55	58	....	55.0
	Minimum	35	30	31	36	35	41	43	37	32	33	45	45	45	50	48	42	40	41	45	39	44	39	32	29	35	37	43	51	44	42	....	39.6
Atlantic City	Maximum	51	53	46	54	50	53	58	46	56	60	60	61	53	67	62	46	46	64	60	57	61	66	47	60	53	55	58	56	53	57	....	54.0
	Minimum	41	42	35	35	34	45	43	38	34	35	47	46	46	46	44	42	43	45	48	40	45	43	35	32	35	42	48	48	46	45	....	41.6
Cape May City	Maximum	54	63	49	64	55	54	61	48	54	64	61	62	66	74	69	47	47	59	60	62	66	67	49	51	55	63	61	63	58	60	....	56.9
	Minimum	38	37	31	38	33	44	43	39	36	32	46	42	47	48	46	43	44	46	46	41	38	45	34	34	37	41	44	49	45	40	....	40.9
Long Branch	Maximum	56	50	46	51	52	50	60	44	50	63	62	47	53	67	50	46	43	53	60	60	47	55	42	45	57	57	72	68	60	67	....	53.4
	Minimum	42	33	28	33	30	36	40	34	33	29	42	43	42	47	43	40	39	42	44	39	39	42	31	28	34	33	38	48	43	43	....	37.9
Sandy Hook	Maximum	53	52	46	52	53	51	58	45	50	53	52	49	54	70	54	46	43	48	58	61	49	59	43	45	53	60	67	65	54	60	....	53.1
	Minimum	37	39	35	39	38	41	42	35	34	38	46	45	46	51	43	42	39	40	47	42	44	39	33	32	38	40	45	45	43	43	....	40.7

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.096	.256	.074	.160	.128	.062	.180	.160	.160	.160	.160	.064	.096	*	.320	*	*	.008	.140	.112	.120	.160	.240	.320	.208	.096	.160	.160	.160	.176	....	4.136
	Wind movement	213	76	71	87	104	174	131	150	118	97	65	43	102	54	124	96	82	66	50	54	114	106	103	119	67	68	100	90	87	70	....	2881
Runyon	Evaporation	.195	.190	.190	.180	.160	.180	.040	.150	.160	.180	.210	.160	.110	.130	.160	.020	.000	.010	.020	.160	.160	.165	.180	.180	.200	.200	.180	.060	.200	.200	....	4.330
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. MAY, 1930. No. 5

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

May temperatures averaged high enough to place the current onth among the warm Mays of record, but this was due to excessive warmth during the first decade. There were eight others in the forty five years preceding that equalled or exceeded it. The course of temperature, however, was contrary to that of the rather rapidly rising normal peculiar to this season of the year, he third decade being slightly cooler than the second and the second decidedly cooler than the first. The temperature reached 90 degrees or higher at all stations, the highest for the month occurring mostly on the 7th, except in the Highlands and the Red Sandstone Plain where the date of occurrence was equally divided between the 7th and 23d. A freezing temperature was recorded at only one station. The lowest for the month occurred along the seacoast on the 26th and 31st, while in the interior t was mostly on the 12th with the 26th and 31st next in frequency. Damage by frost was negligible.

The generally dry condition of the preceding month carried over thru the first thirteen days. During this time there were ome light showers in the northern half of the State but no appreciable rain fell in southern districts. General rains occurred rom the 14th to the 20th inclusive, except on the 17th, and practically ended the drought. Other general showers occurred on the 25th and 28th. The average for the State for the month amounted to about three-fourths of the normal.

Beginning with the afternoon of the 2d a period of unusually ow humidity set in with percentages ranging mostly in the wenties and thirties. This dry condition of the atmosphere, oupled with high westerly winds, on the 3d, 4th and 5th, laid he foundation for the very destructive forest fires on those days n the southern part of the State.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 36 stations, was 62.7°, which was 2.6° above ormal. The highest temperature was 98° at Flemington on he 7th, and the lowest, 31°, at Belleplain on the 12th. The reatest daily range of temperature was 51° at Belleplain on the th. The highest monthly mean temperature was 65.7° at Burlington, and the lowest, 58.7° at Layton.

The temperature departure from the normal for the year, 1930, o date, by sections, is: The Highlands, +1.9°; Red Sandstone Plain, +2.0°; Southern Interior, +2.1°; Sea Coast, +2.7°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 2.75 inches, which was 0.98 inch elow normal. The greatest monthly precipitation was 4.50 nches at Chatham, and the least, 1.54 inches at Bridgeton. The greatest amount of precipitation in any 24 consecutive hours was 1.64 inches at Burlington on the 14-15th. The mean of he number of days on which 0.01 inch or more of precipitation ell was 9, or 2 less than normal.

The precipitation accumulated departure from the normal for he year 1930, to date, by sections, is: The Highlands, —4.64 nches; Red Sandstone Plain, —5.39 inches; Southern Interior, —4.42 inches; Sea Coast, —6.39 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was 3 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 40 miles per hour from the northwest at Atlantic City on the 4th.

MISCELLANEOUS.

The per cent of possible sunshine was 68, or 8 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.98 inches, which was 0.01 inch below normal. The highest reading was 30.42 inches on the 12th, at Ridgefield, and the lowest was 29.57 inches on the 15th at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 2.2 feet, and the highest stage was 2.9 feet on the 1st. At Trenton the mean stage was 1.5 feet, or 1.1 feet below normal. The highest stage was 2.1 feet on the 29th.

Thunderstorms occurred at several stations on the following days: 1, 2, 7, 8, 12, 13, 14, 15, 16, 18, 19, 24 and 28. Light hail was noted at Long Branch on the 7th. Auroras were observed on the 4th, 5th and 31st at Layton and on the 4th at Plainfield. Dense fog occurred at several stations on the 15th and mostly along portions of the coast on the 14th, 15th, 19th and 24th. Light frost occurred at many stations on the 12th and 31st and in portions of Sussex County also on the 21st and 30th.

COMPARATIVE DATA FOR MAY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	57.3	90	29	2.74	5.20	1.18	......	......	......	......
1886	58.8	*87*	**36**	6.07	8.46	4.15	......	......	......	......
1887	63.3	94	35	1.37	3.82	*0.08*	......	......	9	6
1888	58.6	90	26	4.92	6.48	3.00	......	......	18	16
1889	62.3	94	32	4.09	6.60	2.43	......	......	11	12
1890	60.7	*87*	33	4.24	7.17	2.60	......	......	11	12
1891	59.5	93	28	2.97	5.39	1.78	9	11	11	9
1892	60.1	90	30	5.04	6.52	3.26	8	13	10	13
1893	59.4	95	29	4.07	6.38	2.55	13	8	10	10
1894	61.4	93	30	**7.72**	**15.61**	3.57	11	9	11	13
1895	60.9	**102**	28	2.85	3.95	1.66	12	12	7	8
1896	**65.3**	98	29	3.21	4.54	1.62	10	12	9	10
1897	60.6	*87*	29	5.68	9.11	1.71	11	12	8	12
1898	58.5	93	29	7.00	9.26	3.92	8	8	15	18
1899	61.1	94	29	1.92	3.15	1.15	12	12	7	9
1900	60.9	98	26	4.71	7.33	2.53	13	7	11	10
1901	58.6	90	29	5.60	8.13	3.10	9	9	13	16
1902	60.3	95	29	2.04	4.63	1.11	15	11	5	7
1903	62.7	98	*21*	*0.59*	*1.32*	*0.08*	16	10	5	4
1904	62.8	97	31	2.60	6.69	1.01	17	9	5	8
1905	61.4	89	22	1.71	3.94	0.42	12	11	8	8
1906	61.0	94	24	4.21	6.28	2.37	16	8	7	10
1907	55.4	91	22	5.05	8.09	2.51	12	9	10	12
1908	61.6	95	29	7.10	9.99	**4.39**	9	10	12	13
1909	60.0	91	27	2.30	4.84	0.79	10	11	10	9
1910	60.0	94	27	2.54	4.25	1.48	10	10	11	12
1911	64.5	99	22	1.37	3.84	0.31	14	11	6	7
1912	62.0	92	31	4.09	6.47	2.79	11	11	9	11
1913	60.3	94	25	3.45	4.86	2.53	15	7	9	9
1914	63.1	98	30	2.93	5.09	0.95	14	9	7	10
1915	58.1	88	30	3.82	6.15	2.00	13	7	11	13
1916	61.1	90	33	3.48	5.27	2.14	12	11	8	12
1917	*54.0*	90	25	3.83	6.83	2.08	10	10	11	11
1918	64.6	93	31	4.94	7.59	2.74	14	10	7	12
1919	60.9	95	31	4.98	7.68	3.06	14	6	11	12
1920	57.4	89	26	3.00	5.23	1.61	15	8	8	10
1921	60.2	96	32	4.17	6.44	2.60	14	7	10	10
1922	63.0	90	23	3.84	7.55	1.16	18	6	7	8
1923	59.1	90	25	1.66	3.62	0.67	20	6	5	6
1924	56.8	87	25	5.69	7.94	3.36	12	7	12	17
1925	57.7	99	23	2.86	4.94	0.49	13	11	7	8
1926	59.1	90	26	2.58	4.52	1.08	18	9	4	9
1927	58.1	88	30	3.65	8.16	1.93	9	10	12	13
1928	58.0	93	27	2.23	3.49	1.26	12	9	10	12
1929	59.9	95	26	3.49	5.58	1.26	13	8	10	13
1930	62.7	98	31	2.75	4.50	1.54	17	7	7	9

W. B. O.Philadelphia 6-20-30-1050

Climatological Data for May, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 in or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	63.0	+2.3	95	7	38	31	44	3.89	+0.06	1.15	0	10	19	5	7	......	Miss C. S. Hixson.
Charlotteburg††	Passaic	719	38	59.6[e]	+2.1	91[e]	23	33	12	41[e]	2.30	−1.90	0.62	0	10	17	1	13	w.	Newark Water Dept.
Culvers Lake††	Sussex	848	29	......	......	......	......	38	30	....	3.96	+0.33	1.05	0	12	20	5	6	nw.	Brice E. Riker.
Dover	Morris	600	46	61.0	+2.4	91	23	37	12	41	2.82	−1.12	0.90	0	10	8	13	10	......	William C. Harris
Layton	Sussex	480	29	58.7	+0.7	94	7	33	21†	49	2.23	−1.02	0.56	0	11	16	5	10	nw.	A. M. Depue.
Long Valley	Morris	520	....	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	46	61.2	+1.7	91	23	38	26†	35	2.88	−1.05	0.63	0	8	12	10	9	sw.	Irving J. Kern.
Phillipsburg	Warren	363	47	63.0	+1.7	96	7	41	12†	44	3.32	−0.54	0.90	0	8	22	5	4	......	Town Engineer.
Sussex	Sussex	442	35	61.2[e]	+1.3	93[e]	7	34[e]	30	44[e]	3.24	−0.48	0.67	0	11	....	....	....	......	A. J. W. Mowatt
Means and extremes	......	......	....	61.1	+1.7	96	7	33	12†	49	3.08	−0.72	1.15	0	10	16	6	9	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	63.3[a]	+3.0	90[a]	23	41	12	29[a]	2.81	−1.15	1.00	0	9	16	9	6	w.	William Mann.
Boonton	Morris	400	§40	60.0	......	90	23	35	12	43	2.44	−1.62	0.58	......	9	18	3	10	sw.	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	..	4.50	+1.00	1.12	0	11	18	6	7	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	63.8	+1.8	94	23	40	26†	43	2.50	−1.32	0.92	0	10	21	8	2	nw.	Union County Park Com.
Flemington	Hunterdon	140	§44	63.7	+2.4	98	7	38	12†	47	2.21	−1.81	0.52	0	8	21	4	6	nw.	Hiram E. Deats.
Jersey City	Hudson	10	32	63.8	+2.2	91	23	44	26	32	2.83	−0.75	1.07	0	10	15	9	7	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	43	62.2	......	92	7	40	31	34	3.21	−0.81	1.09	0	9	22	4	5	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	62.2	+2.5	95	23	40	12†	43	3.20	−0.59	1.18	0	10	14	7	10	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	63.6	+3.2	94	8	39	31	39	2.54	−1.35	0.90	0	8	19	5	7	w.	N. J. Experiment Station
New Milford††	Bergen	......	12	......	......	......	......	......	......	....	2.98	......	1.01	......	12	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	64.6	+3.1	93	7	44	26†	37	3.05	−1.39	0.85	0	8	16	5	10	sw.	Marion T. Probert.
Plainfield	Union	120	42	62.2	+2.0	91	7	38	12	42	2.60	−1.32	1.06	0	7	10	13	8	nw.	S. K. Pearson.
Ridgefield	Bergen	80	13	61.8	......	92	7	40	26	38	2.77	......	0.96	0	10	13	10	8	nw.	George P. Kirsten.
Somerville, near	Somerset	70	47	62.1	+1.3	94	7	36	12†	50	2.11	−1.74	0.90	0	6	18	5	8	nw.	Julius Gerlich.
South Orange	Essex	200	58	62.8[b]	+2.8	92[b]	7†	36[a]	26	40[b]	4.30	+0.74	1.14	0	13	19	5	7	w.	Everett W. Bird.
Verona	Essex	490	4	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Luther Davis.
Woodcliff Lake††	Bergen	100	12	......	......	......	......	......	......	....	3.42	......	0.98	......	12	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	60	62.6	+2.0	89	23	44	26	30	2.89	−0.35	1.05	0	9	6	13	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	62.8	+2.4	98	7	35	12	50	2.97	−0.93	1.18	0	10	17	7	7	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	62.2	+1.1	93	7†	31	12	51	2.51	−1.31	1.41	0	8	14	11	6	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	47	65.2	+1.2	94	7	43	12	41	1.54	−2.30	0.60	0	8	26	1	4	w.	Bennett K. Matlack
Burlington	Burlington	12	§44	65.7	+3.8	95	7	42	12	36	2.96	−1.25	1.64	0	9	19	5	7	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	36	63.6[c]	+2.3	95[a]	7	36[c]	31	45[c]	2.41	−1.54	1.27	0	8	20	5	6	w.	Charles Welsh.
Indian Mills††	Burlington	76	41	63.6	+1.5	95	7	36	12†	46	3.54	+0.30	1.26	0	8	15	13	3	nw.	James M. Armstrong.
Lakewood	Ocean	54	26	63.8	+3.6	95	7	40	27†	42	2.93	−0.47	1.48	0	9	17	6	8	w.	R. W. Holman.
Moorestown	Burlington	......	67	63.6	+2.3	94	7	40	12	39	3.09	−0.93	1.57	0	9	16	4	11	nw.	Japanese Beetle Laboratory.
Northfield††	Atlantic	25	23	......	......	......	......	......	......	....	2.02	−1.45	0.85	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	64.2	......	92	7	38	12	43	2.61	......	1.08	0	10	18	7	6	w.	Charles S. Beckwith.
Pleasantville††	Atlantic	26	§32	61.9	......	94	7	36	12	37	2.03	−1.23	1.00	......	7	25	3	3	nw.	N. J. Dept. Conservation.
Runyon††	Middlesex	18	6	......	......	......	......	......	......	....	2.38	......	0.58	......	6	21	6	4	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	63.4	+2.3	93	7	42	31	32	1.99	−1.09	1.15	0	8	13	10	8	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	45	5	......	......	......	......	......	......	....	2.20	......	1.26	0	8	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	62.4	+2.5	93	7	36	31	39	2.93	−0.81	0.95	0	8	25	1	5	nw.	John H. Brown.
Philadelphia, Pa	......	117	59	66.4	+3.5	94	7	47	26	29	3.25	−0.01	1.52	0	8	11	14	6	nw.	U. S. Weather Bureau.
Means and extremes	......	......	...	63.6	+2.3	95	7	31	12	51	2.51	−1.10	1.64	0	8	19	6	6	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	63.0	+4.2	92	7	43	26	31	......	......	......	0	....	20	8	3	nw.	Information Bureau.
Atlantic City	Atlantic	16	57	62.8	+4.7	90	6	44	31	28	1.95	−1.10	0.95	0	7	10	15	6	nw	U. S. Weather Bureau.
Cape May City	Cape May	17	46	63.8	+5.2	90	8	46	31	32	2.00	−0.99	1.00	0	9	16	8	7	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	63.4	+5.2	91	7	43	31	32	2.34	−1.42	0.70	0	10	13	12	6	nw.	William D. Martin.
Sandy Hook	Monmouth	22	32	62.0	+3.5	89	7	47	26	29	1.83	−1.89	0.67	0	8	11	11	9	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	63.0	+4.6	92	7	43	26†	32	2.03	−1.35	1.00	0	8	14	11	6	nw.	
For the State	......	......	....	62.7	+2.6	98	7	31	12	51	2.75	−0.98	1.64	0	9	17	7	7	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

†† Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for May, 1930

Stations	Drainage Basin	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	T.	.41						.14						.55	.58	.18		.10	.58	.02					1.15			.18				3.89
Charlotteburg	Passaic		.06	.04											.09	.53	.07			.41	.10					.60			.28	.12			2.30
Culvers Lake	Delaware	.10	.45	.22											.15	.82	.35		.02	.24	.13					1.05			.42	.01			3.96
Dover	Passaic	.27	.09					.04	.01						*	.90			.08	.46						.57			.40				2.82
Layton	Delaware	.11	.19	.06											.36	.56	.14		.06	.24	.16								.32	.03			2.23
Long Valley																																	
Newton	Delaware		.48												.20	.43	.19			.47	.22					.43			.46				2.88
Phillipsburg	...do	.08	T.					T.							.85	.18	T.		.14	.51	T.				.90	.38			.28				3.32
Sussex	Hudson		.32	.43					.16						.15	*	.63		.02	.28		.22				.67			.36				3.24
The Red Sandstone Plain.																																	
Bayonne	Coast	.20	T.				.01		.05						*	1.00		T.	.50	.05					.65				.35				2.81
Boonton ‖‖	Passaic		.17	.29					T	T.						.42	.06		.06	.10	.39					.58				.37			2.44
Chatham ‖	...do		.56	.12					.22	1.12						.62	.31		.04	.11	.32					.61				.47			4.50
Elizabeth	Coast	.01	.12					T.	.09						.23	.69			T.	.43			.01			.50			.39	.03			2.50
lemington	Raritan		T.												.52	.51	.01		.03	.36	.05					.33			.40		T.		2.21
ersey City	Coast	.07	.04				T.	T.	.03						.46	.61	T.		.01	.42	.04	T.	T.		T.	.85			.30	T	T		2.83
ambertville	Delaware	.03													1.09	.40			.14	.49	.48				.24				.30	.04			3.21
ittle Falls ‖‖	Passaic		.17	.02						.02						1.18	.18		.03	.20	.26		T.			.69				.45			3.20
New Brunswick	Raritan							T.							.30	.60	.04		.02	.55	.05					.53			.45	T.			2.54
New Milford.**	Hackensack	.10	.09					.02							1.01	.10		.05	.09	.34		.17			.50	.02			.49				2.98
aterson	Passaic		.17	.08					.45						.36	.85			.30	.35									.49				3.05
lainfield	Raritan	.27													.66	.40	T.			.41	.04					.41			.41				2.60
idgefield**	Hackensack	.37		.05					.01						*	.96			.03	.47	.04	.04			T.	.47			.33				2.77
omerville	Raritan		T.												.50	.40				.37	.02				T	.41			.41				2.11
outh Orange	Rahway		.40	.25				.15	.08	.26					.08	1.03	.07		T.	.38	.07					1.14			.34	.05			4.30
erona**	Passaic																																
oodcliff Lake**	Hackensack	.13	.06					.09	.28						.98	.09		.08	.16	.28		.12			.58				.57				3.42
New York, N. Y***	Coast	.09	T.				T.	T.	.03						.80	.26	T.		.01	.48		T	T.		.13	.75			.34	T.	T.		2.89
The Southern Interior.																																	
elleplain	Tuckahoe														1.35	.06			.50	.28	.08					.16			.06		.02		2.51
ridgeton	Coast														.60	.07	.12		.05	.14	.05					.49			.02				1.54
urlington	Delaware		.21				T.								.71	.93	.30		.07	.12	.12					.13			.37				2.96
layton	Delaware																																
ightstown	Raritan	T.	.06												.50	.77	.17		T.	.25	.09					.30			.27				2.41
ndian Mills	Mullica	T.					.06								1.26	.10	.47			.97	.14				T.	.32			.22				3.54
akewood	Metedeconk		.05				T.								.45	1.48	.06		.04	.20	.11					.24			.30				2.93
oorestown ‖‖	Delaware		.02					.06								1.57	.24			.15	.13					.40			.01	.51			3.09
orthfield	Coast														.85	.15	.10		.34	.32	.11					.13			.02				2.02
emberton			.04				.04								.68	.40	.37		.09	.27	.10					.18			.44				2.61
leasantville ‖‖	Coast															1.00	.09		.24	.14	.24					.28				.04			2.03
unyon	Coast														.44	.58	.04				.56					.45				.31			2.38
renton***	Delaware	.03													1.12	.11	T.		.01	.19					.20	.07			.26				1.99
renton No. 2 ‖‖	Delaware		.06				T.									1.26	.09		.03	.06	.17					.22			T.	.31			2.20
uckerton	Coast														.95	.25	.45			.80	.05					.22			.20	.01			2 93
hila., Pa***	Delaware	.10					T.								1.48	.31		T.	.01	.29					.59	.20			.27				3.25
The Sea Coast.																																	
sbury Park	Coast																																
tlantic City***	...do						T.	T.							.94	.10			.19	.39					.12	.18			.03		T.		1.95
ape May City	...do	T.	T.				T.								.36	.01	.02		.31	.98	.02				T.	.16			.12		.02		2.00
ong Branch**	...do	.01						.07	.03						.70	.33			.20	.26					.02	.50			.22				2.34
andy Hook***	...do	T.						T.	.02						.52	.15			.01	.27		T.			.04	.45			.37				1.83

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖‖ Precipation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	29.99	30.39	12	29.58	15	15.5	40	nw.	4	68	56	67	70
ong Branch	29.99	30.40	12	29.57	15					72	66	59	
oorestown										67	47	57	
ew York, N. Y	29.97	30.41	12	29.63	15	14.6	50	nw.	3	64	51	54	68
hiladelphia, Pa	30.01	30.41	12	29.61	15	12.3	38	sw.	2	65	47	59	74
idgefield	29.97	30.42	12	29.63	15								
andy Hook	29.96	30.39	12	29.61	15	12.9	35	s.	2	69	55	64	62
renton	29.98	30.38	12	29.59	15	9.7	35	sw.	14	64	45	53	73
erona													

Daily Temperatures for May, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	84	86	76	85	90	90	95	90	89	87	76	79	88	81	66	69	78	70	54	65	76	86	93	79	65	62	68	64	64	65	64	76.9
	Minimum	50	51	52	44	46	57	62	62	53	48	45	47	53	56	49	48	47	48	46	48	42	48	61	57	50	43	41	45	45	42	38	49.2
Charlotteburg	Maximum	82	84	68	74	87	85	90	89	85	....	....	....	....	....	59	67	77	71	56	58	73	81	91	89	62	58	63	58	60	61	59	72.6[e]
	Minimum	42	48	51	48	49	64	62	62	57	40	34	33	48	51	50	47	41	44	43	43	48	40	58	53	48	40	38	42	42	37	41	46.6
Dover	Maximum	83	84	72	77	89	90	90	88	88	84	72	75	82	70	60	67	77	66	56	64	76	82	91	77	65	58	66	56	60	63	63	73.9
	Minimum	50	43	52	48	51	62	64	63	54	46	51	37	52	52	47	49	47	46	45	47	43	48	54	54	46	40	39	41	43	41	40	48.2
Layton	Maximum	83	85	68	76	89	90	94	88	85	83	73	74	83	70	52	68	78	61	50	60	75	81	90	77	62	60	63	55	60	61	60	72.7
	Minimum	48	53	48	45	40	52	52	55	48	38	35	34	48	52	46	48	42	45	46	46	33	44	54	52	48	34	41	40	44	33	42	44.7
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	85	84	79	78	80	90	89	89	86	83	73	75	85	71	58	68	78	68	65	53	74	82	91	81	62	63	64	56	59	62	70	74.2
	Minimum	50	54	45	47	55	60	62	62	58	49	43	43	52	52	45	46	50	43	44	45	41	47	62	49	47	38	38	44	42	40	42	48.2
Phillipsburg	Maximum	85	87	73	80	91	90	96	93	89	86	75	77	87	69	65	68	81	69	53	66	73	85	92	74	66	62	70	59	62	65	64	75.9
	Minimum	53	52	55	49	47	60	60	64	53	50	47	41	53	55	51	47	49	50	47	50	41	50	61	54	50	43	44	46	48	44	43	50.2
Sussex	Maximum	83	84	80	75	84	90	93	87	....	84	75	75	83	70	....	68	78	74	51	....	....	83	92	89	73	58	63	58	58	60	....	75.9[e]
	Minimum	51	53	48	45	45	51	54	60	....	44	38	36	55	53	....	46	44	46	46	....	....	42	55	56	49	37	40	39	44	34	.. .	46.6[e]
The Red Sandstone Plain.																																	
Bayonne	Maximum	74	83	79	77	86	88	88	84	85	80	74	64	81	77	65	62	74	70	52	62	72	77	90	84	....	58	64	63	60	62	58	73.1[a]
	Minimum	47	62	59	55	63	70	67	69	66	55	50	41	53	50	52	52	57	49	45	47	51	58	60	55	55	44	46	46	45	47	43	53.5
Boonton§§	Maximum	79	83	70	75	87	88	88	85	85	83	68	73	83	70	59	68	76	60	57	63	74	81	90	65	65	60	65	59	62	63	62	72.5
	Minimum	42	50	55	51	44	63	57	61	51	49	38	35	49	51	47	49	44	47	44	45	47	43	53	55	51	43	43	48	43	41	37	47.6
Elizabeth	Maximum	89	87	80	79	92	93	93	92	90	84	78	71	89	85	60	73	80	76	56	62	78	80	94	89	63	61	63	65	65	68	65	77.4
	Minimum	48	54	55	45	49	63	63	64	55	54	49	41	51	54	48	51	49	50	47	50	46	49	57	58	51	40	41	47	45	45	40	50.3
Flemington	Maximum	85	87	79	81	93	92	98	94	91	90	79	77	90	82	70	71	81	75	55	69	78	86	93	83	66	65	69	65	63	66	65	78.6
	Minimum	47	51	54	48	46	62	61	60	55	52	45	38	51	54	49	49	48	44	46	49	43	49	61	50	49	42	43	43	45	42	38	48.8
Jersey City	Maximum	81	84	70	76	89	90	90	87	86	80	65	70	84	72	60	70	78	62	55	66	73	79	91	80	64	61	67	62	63	62	61	73.5
	Minimum	50	61	58	51	60	70	68	71	62	55	52	52	54	52	51	53	60	51	47	50	49	58	59	58	50	44	45	49	47	49	45	54.2
Lambertville	Maximum	82	84	70	76	87	89	92	89	86	83	72	76	85	66	65	68	79	73	52	65	73	83	90	73	63	60	63	62	63	62	60	73.9
	Minimum	48	56	53	50	54	66	65	62	59	53	45	41	52	52	51	49	50	49	46	48	44	55	65	55	45	41	41	46	44	42	40	50.5
Little Falls§§	Maximum	84	87	73	80	92	93	94	91	84	85	70	75	88	75	59	71	81	57	60	66	78	83	95	67	65	61	67	61	63	66	65	75.4
	Minimum	48	53	54	47	49	62	60	63	52	48	43	40	53	54	48	51	47	47	46	46	47	47	55	55	50	41	40	45	44	42	41	49.0
New Brunswick	Maximum	84	88	82	77	90	91	93	94	87	84	72	77	87	82	62	70	79	75	56	65	74	84	91	86	65	63	66	66	64	65	62	76.8
	Minimum	48	55	54	49	51	64	62	62	58	52	47	40	52	53	51	50	48	50	46	48	45	51	63	56	51	41	43	47	45	45	39	50.5
Paterson	Maximum	84	88	82	79	92	92	93	90	87	84	77	74	87	82	58	71	80	77	65	65	76	79	91	85	64	61	65	63	62	64	64	76.8
	Minimum	50	55	57	50	55	67	67	68	60	54	48	46	54	55	48	53	53	48	47	50	47	54	60	57	51	44	45	50	45	47	44	52.5
Plainfield	Maximum	83	87	73	78	90	90	91	89	87	80	66	76	85	72	61	72	79	62	55	66	74	79	90	80	66	62	68	62	63	62	61	74.5
	Minimum	47	52	56	48	48	64	61	62	53	48	45	38	52	53	49	51	48	49	45	49	48	50	58	57	50	42	42	50	44	45	39	49.8
Ridgefield	Maximum	84	87	72	77	90	91	92	86	87	79	68	71	87	70	57	71	78	59	52	66	77	78	91	64	63	62	66	60	64	65	64	73.5
	Minimum	50	57	54	48	52	65	63	64	57	49	45	45	52	49	48	52	52	47	47	49	45	50	57	55	46	40	42	46	43	45	41	50.2
Somerville	Maximum	85	87	77	79	91	91	94	92	89	85	72	78	90	80	67	71	80	64	54	68	76	86	91	70	67	64	70	56	65	67	65	76.5
	Minimum	46	51	51	42	41	61	59	60	53	46	42	36	49	54	50	48	46	51	47	48	40	48	61	57	49	39	39	43	45	41	36	47.7
South Orange	Maximum	84	87	87	79	90	91	92	....	89	88	78	70	88	87	59	70	79	79	55	52	75	75	92	92	66	66	67	67	57	....	59	76.6[b]
	Minimum	46	53	54	47	50	64	61	63	54	49	44	40	50	56	48	51	47	48	46	49	42	48	56	55	51	36	38	44	42	....	41	49.1[a]
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	79	82	69	75	85	87	87	83	84	79	64	66	83	72	59	68	76	61	54	64	71	76	89	64	61	58	63	60	62	61	60	71.0
	Minimum	51	62	58	52	61	71	68	72	63	55	52	52	54	52	51	53	60	51	47	50	50	58	59	54	49	44	45	48	47	49	45	54.3
The Southern Interior.																																	
Belleplain	Maximum	84	82	76	80	90	90	93	93	89	80	69	71	84	71	73	74	83	74	58	72	75	84	87	82	68	63	66	69	67	67	65	76.7
	Minimum	48	51	56	40	39	63	57	53	60	54	41	31	47	56	57	49	49	51	50	48	38	57	54	54	50	35	34	38	39	43	36	47.7
Bridgeton	Maximum	84	88	76	80	89	88	94	91	90	85	72	73	84	68	72	74	83	75	57	73	75	86	90	85	67	67	68	70	67	68	66	77.6
	Minimum	53	56	57	47	48	64	60	59	65	60	49	43	54	60	57	52	55	55	50	52	47	56	61	52	50	44	44	48	45	51	44	52.8
Burlington	Maximum	83	86	85	80	91	89	95	92	91	85	82	74	86	84	69	71	80	78	61	69	75	86	91	89	82	63	68	68	65	62	69	79.0
	Minimum	49	55	59	55	57	59	61	64	57	54	52	42	56	53	53	53	58	53	48	50	44	53	61	53	48	45	46	46	46	45	48	52.4
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	84	88	80	78	90	92	95	92	88	84	....	82	86	74	66	72	80	72	56	70	77	87	92	74	66	68	69	58	66	67	64	77.2[e]
	Minimum	47	54	56	48	45	60	62	58	54	....	....	....	52	56	53	49	45	51	47	48	43	51	74	56	51	40	42	40	44	42	36	50.1[c]
Indian Mills	Maximum	87	89	82	78	92	91	95	92	86	82	72	77	87	77	70	73	83	75	56	70	74	86	92	84	69	63	68	62	67	63	64	77.6
	Minimum	46	53	56	43	46	63	60	60	60	52	46	36	46	56	55	49	49	55	48	50	38	54	59	57	52	39	39	42	43	46	36	49.5
Lakewood	Maximum	86	88	81	79	89	91	95	89	89	80	73	72	86	81	67	72	82	77	56	68	75	79	84	92	87	63	67	67	64	65	65	77.7
	Minimum	47	52	56	47	47	63	65	62	57	51	44	35	51	55	54	50	49	52	45	50	41	53	56	60	51	41	40	42	43	45	40	49.8
Moorestown	Maximum	84	86	76	80	88	89	94	90	97	82	72	76	85	68	77	70	79	61	54	78	74	84	89	81	66	62	68	55	64	65	65	75.8
	Minimum	49	55	56	52	49	65	62	64	57	52	46	40	53	55	52	51	50	52	48	49	45	56	62	57	51	45	46	47	45	45	41	51.5
Pemberton	Maximum	85	86	84	80	90	89	92	90	89	88	70	77	85	84	69	70	80	67	55	69	74	84	89	88	67	63	67	66	64	66	65	77.2
	Minimum	49	51	56	49	47	63	62	62	58	53	47	38	50	59	55	51	51	54	48	50	42	53	61	57	52	45	45	45	44	47	41	51.2
Pleasantville§§	Maximum	78	80	73	77	81	89	94	89	85	73	62	66	80	70	72	73	78	59	59	70	73	79	87	74	67	62	65	62	66	65	64	73.3
	Minimum	48	58	57	43	44	60	62	59	60	52	51	36	50	56	59	51	52	52	51	51	42	57	61	56	52	39	40	39	42	49	37	50.5
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	82	34	73	76	88	83	93	90	86	82	68	76	84	71	67	69	78	61	54	66	74	84	90	74	65	61	66	56	64	63	62	74.0
	Minimum	51	58	57	51	56	65	64	66	65	55	49	46	53	53	51	53	53	52	48	49	47	57	65	55	47	44	44	47	46	48	42	52.8
Tuckerton	Maximum	78	80	75	79	83	91	93	88	88	78	67	68	85	66	73	73	77	65	55	72	78	84	90	75	68	66	69	65	65	68	68	75.2
	Minimum	49	55	53	40	48	52	62	60	57	53	48	40	48	55	50	64	55	50	48	50	40	53	58	55	50	38	38	45	40	48	36	49.6
Philadelphia, Pa.	Maximum	83	85	76	79	89	89	94	91	88	84	73	73	85	70	70	70	81	68	57	70	75	85	88	84	66	62	69	60	67	64	65	76.1
	Minimum	55	61	60	57	60	69	67	72	70	61	54	52	57	58	54	55	60	56	52	52	52	61	64	55	50	47	48	51	49	51	48	56.7
The Sea Coast.																																	
Asbury Park	Maximum	70	79	74	78	87	91	92	81	80	71	63	63	84	70	64	72	79	69	55	68	74	72	89	86	66	61	68	59	62	64	65	72.8
	Minimum	51	53	55	50	57	65	64	58	59	56	54	46	53	54	53	51	56	54	49	51	48	58	70	58	51	43	45	50	46	51	44	53.3
Atlantic City	Maximum	70	66	75	78	74	90	83	86	86	66	59	61	67	66	70	74	71	66	55	72	75	77	80	68	68	63	68	60	66	67	66	70.7
	Minimum	51	56	56	52	57	62	64	65	65	56	54	53	56	57	57	55	59	53	52	52	51	60	65	59	49	45	46	52	46	51	44	54.8
Cape May City	Maximum	80	78	76	77	75	88	90	90	86	74	65	66	70	63	75	76	76	65	60	74	74	84	82	74	68	65	68	70	68	66	65	73.8
	Minimum	51	55	54	49	50	62	61	58	60	53	50	53	54	58	56	55	58	50	54	54	49	61	62	57	50	48	48	54	50	48	46	53.8
Long Branch	Maximum	80	88	75	80	87	90	91	81	80	74	62	65	83	70	62	72	80	65	56	66	74	73	86	69	65	63	68	61	62	63	62	72.7
	Minimum	55	60	58	52	55	65	66	65	59	56	49	45	55	55	55	56	54	54	51	53	47	56	64	57	57	44	46	50	45	47	43	54.0
Sandy Hook	Maximum	75	83	69	73	85	84	89	81	83	76	60	64	81	67	60	69	77	62	54	65	72	74	88	60	62	60	64	59	63	63	62	70.5
	Minimum	51	58	56	53	56	63	64	63	56	53	51	50	54	51	51	54	57	52	48	51	51	57	59	56	50	47	48	50	48	51	48	53.5

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.160	.192	.352	.272	.352	.224	.352	.288	.320	.288	.288	.352	.128	.024	.154	.208	.224	.108	.096	.224	.224	.256	.288	.312	.304	.160	.320	.072	.112	.160	.224	7.038
	Wind movement	74	158	164	31	97	72	65	48	84	71	77	73	48	67	51	64	68	72	75	94	65	56	50	94	92	80	75	71	40	40	85	2301
Runyon	Evaporation	.210	.220	.220	.240	.250	.250	.260	.210	.250	.250	.255	.255	.200	.040	.040	.140	.180	.120	.160	.060	.180	.210	.240	.100	.070	.180	.200	.100	.010	.180	.200	5.480
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. JUNE, 1930. No. 6

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The warm weather that characterized the preceding month was continued through June, with the exception of the second week which was slightly below the normal. It was the warmest June since 1925. The maxima for the month were mostly in the lower nineties and occurred on the 4th and 5th in the northern half of the State and on the 4th and 25-26th in the southern part. The lowest temperatures occurred, without exception, on the 1st, and were in the thirties and forties. Two stations experienced temperatures down to the freezing point, or below, and the lowest reported (30 degrees at Bellcplain) equals the lowest ever recorded in the State during the month of June. The other case was in 1924 at Charlotteburg. No damage by frost was reported, the one at Belleplain being recorded as light.

Rain occurred at well distributed intervals beginning on the 6th in the northern part, overspreading the south on the 7th, and continuing through the 10th, culminating on that date with general, heavy rains of from one to three inches, or more. Other rather general rain periods were from the 17th to 19th., on the 24th, and the 27th. The average total for the State amounted to about ten percent more than the normal and this is the first month this year to show an excess. The first half of the year ends with the total precipitation amounting to 79% of the normal. The three crop growing months of April, May and June received 84% of the normal amount for that period.

Thunderstorms occurred with about the usual frequency, with only a few developing destructive proportions. On the 10th a severe windstorm visited East Windsor Township, Mercer County, uprooting trees and overturning farm buildings. Damage to the extent of several thousand of dollars was done, but there were no human casualties. No damage by hail was reported during the month.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 70.8°, which was 2.6° above normal. The highest temperature was 98° at Somerville on the 4th, and the lowest, 30°, at Belleplain on the 1st. The greatest daily range of temperature was 47° at Highstown on the 4th. The highest monthly mean temperature was 73.8° at Bridgeton, and the lowest, 62.7° at Long Branch.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +2.1°; Red Sandstone Plain, +2.1°; Southern Interior, +2.2°; Sea Coast, +2.7°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 4.17 inches, which was 0.47 inch above normal. The greatest monthly precipitation was 6.48 inches, at Moorestown, and the least, 2.46 inches at Pleasantville. The greatest amount of precipitation in any 24 consecutive hours was 3.68 inches at Pemberton on the 9-10th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands, —3.77 inches; Red Sandstone Plain, —5.17 inches; Southern Interior, —3.96 inches; Sea Coast, —5.91 inches.

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WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 11 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 52 miles per hour from the southeast at Atlantic City on the 10th. High winds also occurred in other sections on the 6th, 10th and 26th, in connection with thunderstorms.

MISCELLANEOUS.

The percent of possible sunshine was 70, or 9 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.97 inches, which was 0.01 inch below normal. The highest reading was 30.38 inches on the 3d, at Atlantic City, and the lowest was 29.51 inches on the 21st at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 2.8 feet, and the highest stage was 8.2 feet on the 18th. The mean stage at Trenton was 1.6 feet, or 0.3 foot below normal. The highest stage was 4.7 feet on the 12th.

Light hail was noted at Bayonne on the 21st and at Indian Mills on the 29th; no damage reported. Thunderstorms were recorded on the following dates: 6, 7, 10, 12, 18, 19, 21, 22, 23, 24, 26, 27 and 29. Dense fog occurred at numerous interior stations on the 11th, 12th, 13th and 14th, and along portions of the coast, in addition to the above dates, on the 7th, 8th, 9th, 10th, 17th, 18th, 19th, 24th and 26th. Light frost occurred on the 1st in sections of the southeast portion and in extreme northwestern Sussex county. An aurora was observed at Layton on the 1st.

COMPARATIVE DATA FOR JUNE

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	68.7	97	39	1.79	*3.37*	0.72	......	......	......	......
1886	67.1	91	41	3.38	5.79	2.22	......	......	......	......
1887	68.2	97	42	6.77	10.29	4.21	......	......	9	10
1888	70.8	99	39	2.59	5.69	1.67	......	......	5	6
1889	69.9	91	40	3.73	6.75	2.39	......	......	10	10
1890	70.7	95	42	3.59	5.16	0.99	11	13	6	7
1891	69.7	102	38	2.92	6.71	1.24	14	9	7	5
1892	72.4	98	**44**	3.85	6.12	1.58	10	12	8	11
1893	69.7	103	40	2.95	7.02	0.46	10	11	9	8
1894	70.6	102	35	2.28	5.90	0.99	14	11	5	9
1895	71.7	103	39	3.24	5.99	0.93	11	11	8	10
1896	68.1	96	37	5.46	13.45	2.64	12	10	8	10
1897	66.1	95	35	3.38	5.50	2.12	10	13	7	10
1898	70.1	100	38	2.10	3.54	1.13	14	12	4	8
1899	72.3	103	38	2.50	4.34	1.01	15	10	5	7
1900	70.4	97	39	3.08	4.91	1.10	12	12	6	8
1901	70.0	103	35	*1.57*	4.36	0.73	18	8	4	5
1902	67.5	99	37	6.57	10.21	**4.54**	14	11	5	11
1903	*64.0*	92	37	**7.68**	**15.02**	2.39	6	10	14	15
1904	68.6	100	34	3.13	5.44	1.91	13	10	7	12
1905	68.3	96	35	3.43	8.71	1.67	11	12	7	10
1906	70.4	98	38	4.48	9.18	1.45	11	11	8	12
1907	64.7	96	31	4.41	6.85	3.15	12	10	8	10
1908	69.9	99	35	2.32	4.63	0.77	16	12	2	4
1909	70.0	99	36	3.26	5.70	1.71	9	10	11	12
1910	66.9	95	34	5.17	8.01	2.66	9	10	11	13
1911	68.9	97	40	5.36	10.11	2.84	9	12	9	14
1912	68.0	98	33	1.94	3.61	0.91	9	12	9	8
1913	69.1	98	31	1.80	3.76	0.68	19	8	3	5
1914	68.5	98	35	2.66	4.85	1.09	16	9	6	7
1915	67.0	95	37	3.12	6.51	1.40	13	10	7	11
1916	64.7	*87*	36	4.20	5.99	2.22	10	9	11	13
1917	68.9	95	40	4.27	7.14	2.80	13	10	7	12
1918	66.3	96	32	3.43	6.21	1.35	15	9	6	8
1919	69.5	99	38	3.16	3.58	*0.37*	16	7	7	8
1920	68.4	98	38	6.18	11.26	3.12	13	9	8	12
1921	70.4	100	33	3.23	5.64	1.40	18	7	5	8
1922	71.1	95	39	6.31	11.50	2.97	12	9	9	15
1923	72.5	**106**	37	2.08	5.44	0.72	18	8	4	7
1924	66.8	95	*30*	4.20	7.32	1.72	11	11	8	13
1925	**73.6**	103	36	3.10	6.16	0.72	17	9	4	9
1926	64.9	97	31	2.60	4.73	1.29	12	9	9	11
1927	65.4	97	31	3.16	5.24	1.46	15	9	6	10
1928	66.6	93	36	6.75	10.34	3.03	10	9	11	15
1929	69.5	98	33	3.11	5.41	1.41	15	9	6	9
1930	70.8	98	*30*	4.17	6.48	2.46	16	8	6	8

W. B. O.Philadelphia 7-18-30-1050.

Climatological Data for June, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	72.0	+3.2	96	5	40	1	42	4.00	0.00	1.67	0	7	22	3	5	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	69.4	+4.6	92	5	36	1	46	5.67	+1.55	2.95	0	6	19	3	8	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	......	......	......	45	1	....	5.45	+0.84	2.15	0	9	21	5	4	s.	Brice E. Riker.
Dover	Morris	600	46	69.6[a]	+2.9	93[a]	4†	40[a]	1	41[a]	5.36	+1.33	3.51	0	6	8	14	8	......	William C. Harris
Layton	Sussex	480	29	68.1	+2.6	94	4	33	1	46	4.48	+0.69	2.08	0	8	17	7	6	sw.	A. M. Depue.
Long Valley	Morris	520	....	69.0	......	93	4†	38	1	46	3.67	......	2.42	0	7	19	9	2	s.	S. N .Dilts.
Newton	Sussex	769	46	69.8	+1.8	92	5	40	1	37	4.30	+0.32	1.98	0	7	13	7	10	sw.	Irving J. Kern.
Phillipsburg	Warren	363	47	72.0	+2.7	95	5	42	1	43	3.44	−0.19	1.48	0	7	24	2	4	....	Town Engineer.
Sussex	Sussex	442	35	69.2[a]	+2.4	95[a]	4	35[a]	1	46[a]	6.09	+2.41	2.90	0	5	14	10	6	w.	A. J. W. Mowatt.
Means and extremes	......	......	....	69.9	+2.9	96	5	33	1	46	4.72	+0.87	3.51	0	7	17	7	6	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	70.9	+2.5	88	5†	52	1	23	2.83	−0.95	1.10	0	6	13	12	5	w.	William Mann.
Boonton	Morris	400	§40	69.4	......	91	4	32	1	45	4.32	+0.65	1.52	......	7	16	3	11	sw	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	....	5.47	+1.41	1.71	0	8	21	3	6	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	72.8	+2.3	96	4†	40	1	44	2.92	−0.70	1.12	0	8	21	6	3	sw.	Union County Park Com.
Flemington	Hunterdon	140	§44	72.4	+3.2	96	4	41	1	45	3.82	−0.02	1.67	0	10	18	8	4	sw.	Hiram E. Deats.
Jersey City	Hudson	10	32	73.0	+2.1	93	4†	47	1	29	2.68	−0.82	1.08	0	10	8	15	7	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	43	71.6	......	93	5	44	1	34	3.86.	−0.05	2.38	0	10	21	3	6	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	71.8	+3.8	96	4†	39	1	46	5.04	+1.52	2.03	0	8	19	4	7	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	72.0	+2.9	95	4†	43	1	38	4.39	+0.63	2.45	0	8	17	11	2	s.	N. J. Experiment Station.
New Milford‡‡	Bergen	......	12	......	......	......	......	......	......	....	3.78	......	1.65	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	73.2	+3.4	95	4†	43	1	40	4.72	+0.60	1.70	0	6	7	14	9	sw.	Marion T. Probert.
Plainfield	Union	120	42	71.0	+2.4	94	4†	39	1	42	4.38	+0.64	2.38	0	8	9	14	7	sw.	S. K. Pearson.
Ridgefield	Bergen	80	13	72.0	......	94	4	42	1	40	2.65	......	0.72	0	8	13	11	6	s.	George P. Kirsten.
Somerville, near	Somerset	70	47	71.4	+2.3	98	4	37	1	46	3.60	−0.14	2.06	0	10	15	9	6	sw.	Julius Gerlich.
South Orange	Essex	200	58	70.7	+2.2	95	5	40	1	43	3.67	+0.12	1.61	0	7	19	2	9	w.	Everett W. Bird.
Verona††	Essex	490	4	70.2	......	90	5	45	1	31	4.18	......	1.86	0	12	9	15	6	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	3.66	......	0.93	......	8	....	....	....	......	Hackensack Water Co.
New York, N.Y	......	365	60	71.8	+3.0	90	5	48	1	27	2.60	−0.73	1.04	0	10	7	15	8	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	71.7	+2.7	98	4	32	1	46	3.86	+0.22	2.45	0	8	16	8	6	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	70.6	+1.9	93	4†	30	1	46	4.38	+1.16	1.53	0	7	10	12	8	sw.	A. F. Waldron.
Bridgeton	Cumberland	30	47	73.8	+1.7	96	26	48	1	40	3.12	−0.61	1.68	0	8	21	5	4	sw.	Bennett K. Matlack
Burlington	Burlington	12	§44	73.0	+3.3	95	26	49	1	41	3.43	−0.45	1.28	0	8	14	8	8	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	36	71.6	+2.6	96	4	36	1	47	4.59	+0.99	2.40	0	6	20	5	5	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	72.0	+2.2	96	4†	35	1	45	4.38	+0.25	2.02	0	8	13	14	3	sw.	James M. Armstrong.
Lakewood	Ocean	54	26	70.9	+3.4	94	4†	39	1	41	3.90	+0.19	1.40	0	10	17	8	5	sw.	R. W. Holman.
Moorestown	Burlington	......	67	72.0	+2.0	93	26	42	1	36	6.48	+2.76	2.09	0	9	15	5	10	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	......	......	......	......	......	....	4.19	+0.52	1.44	0	7	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	72.4	......	94	5	39	1	39	5.99	......	3.68	0	9	16	9	5	se.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	69.2	......	91	4†	33	1	42	2.46	−1.47	0.80	......	6	22	5	3	sw.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	......	......	......	......	......	......	....	3.81	......	1.56	......	7	19	9	2	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	73.0	+3.5	94	26	46	1	33	4.25	+1.16	2.67	0	11	10	12	8	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	5	......	......	......	......	......	......	....	4.15	......	......	......	....	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	70.0	+1.6	95	4	38	1	40	4.43	+0.60	2.25	0	9	20	4	6	s.	John H. Brown.
Philadelphia, Pa	......	117	59	75.2	+3 8	94	26	51	1	28	4.96	+1.72	2.81	0	11	9	15	6	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	71.7	+2.5	96	4†	30	1	47	4.25	+0.46	3.68	0	8	16	8	6	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	68.1	+0.7	93	4	49	1	35	2.69	−0.93	0.59	0	10	17	11	2	sw.	Information Bureau.
Atlantic City	Atlantic	16	57	69.7	+3.1	90	25	49	1	27	5.04	+2.00	3.01	0	10	7	14	9	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	69.6	+1.9	88	25	45	1	31	3.20	+0.16	1.42	0	9	11	12	7	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	71.2	+3.5	94	4	43	1	35	5.41	+1.61	2.00	0	11	14	6	10	s.	William D. Martin.
Sandy Hook	Monmouth	22	32	71.0	+3.2	91	4	51	1	33	3.32	−0.46	1.38	0	12	8	14	8	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	68.2	+2.5	94	4	43	1	35	3.93	+0.48	3.01	0	10	12	11	7	s.	
For the State	......	......	....	70.8	+2.6	98	4	30	1	47	4.17	+0.47	3.68	0	8	16	8	6	sw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for June, 1930

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						.05			.53	1.67	.30							.60						.26			.59					4.00
Charlotteburg	Passaic							.25		.37	2.95								.91			.02						1.17					5.67
Culvers Lake	Delaware						.15	.02		.88	2.15	.02						.03	.70			.20						1.80					5.45
Dover	Passaic									.48	3.51							*	.69						.08			.60					5.36
Layton	Delaware						.39	.02		.35	2.08	.09							.35								1.06	.14					4.48
Long Valley										.31	2.42		T.						.36		.01		.01		.08			.48					3.67
Newton	Delaware							T.	.02	.56	1.98							.13	.52			.03						1.06					4.30
Phillipsburg	do						.05		.03	.90	1.48		T.					T.	.33						.14		.51	T.					3.44
Sussex	Hudson									.34	2.02								.77			.06						2.90					6.09
The Red Sandstone Plain.																																	
Bayonne	Coast						T.		.45		.90							.30	.05		.03							1.10					2.83
Boonton ‖	Passaic							.12		.64	1.52	.47		T.					.52	.04								1.01					4.32
Chatham ‖	do							.21		.63	1.71	.88							.40	.21						.12		1.31					5.47
Elizabeth	Coast							.05		.31	1.12							T.	.25	.09	.04				.04			1.02					2.92
Flemington	Raritan							.17		.26	1.67		T.	.02				.02	.56	.57					.08			.45	.02				3.82
Jersey City	Coast							.04	.30	*	1.00		T.					.12	.09	.04	T.				.01		*	1.08					2.68
Lambertville	Delaware						T.	.06	T	*	2.38		.13					.40	.13	.30		.10		.08			.28						3.86
Little Falls. ‖	Passaic							.17	T.	.46	2.03	.15							.63	.08						.03		1.49					5.04
New Brunswick	Raritan							.05	T.	.36	2.45	T.						.19	.08	.37			T.		.03			.86					4.39
New Milford.**	Hackensack																																
Paterson	Passaic						.20			.35	1.70							*	.64						.50			1.33					4.72
Plainfield	Raritan						.31	T.	T.	.62	2.38							.20	.18	.05	.02	T.			T.			.62					4.38
Ridgefield**	Hackensack						.08	.01		.47	.84							.19	.27						.02			.77					2.65
Somerville	Raritan							.12		.32	2.06			.01				.25	.06	.14		.17			.07			.40					3.60
South Orange	Rahway							.14		.51	1.61							.03	.46						.05			.87					3.67
Verona**	Passaic																																
Woodcliff Lake**	Hackensack																																
New York, N. Y***	Coast						T.	.03	.33	.41	.55		T.					.12	.07	.04	T.				.01		1.02	.02					2.60
The Southern Interior.																																	
Belleplain	Tuckahoe							.79	.15	.63	1.53							.19	.03		T.							1.06		T.			4.38
Bridgeton	Coast							.18	.05	.44	.69							.02							.02	.04		1.68					3.12
Burlington	Delaware							.01		.40	1.28		.03					T.	.13	.48					.05			1.05			T.		3.43
Clayton	Delaware																																
Hightstown	Raritan							T.		.30	2.40							.21		.34	T.		.04		T.			1.30		T.			4.59
Indian Mills	Mullica							.20	.07	.38	2.02							.09							.10			1.28		.24			4.38
Lakewood	Metedeconk							.50	.16	.38	1.40							.20	.05	.44			.04		.10			.63					3.90
Moorestown ‖	Delaware								.05	.17	1.48	.28		1.35	T.				.14	.85						.07		2.09			T		6.48
Northfield	Coast							.68	.16	.27	1.44							1.09								.07		.48					4.19
Pemberton								.28	.03	.10	3.68		T.					.12	.05	T.					.14			1.56		.03			5.99
Pleasantville ‖	Coast								.57	.22	.20		T.	T.					.62	T						.05		.80					2.46
Runyon	Coast							.05		.39	1.56							.07	.20	.36								1.18					3.81
Trenton***	Delaware						T.	.02	.11	.59	2.12		T.	T.	T.			.17	.16	.39		T.			.02		.58	.08		.01			4.25
Trenton No. 2 ‖	Delaware							T.	*	*	*	*	*	*	3.05				.27	.26	T.		T.			.03		.51			.03		4.15
Tuckerton	Coast							.28	.16	.25	2.25				.01			.45			T.				.05			.95		.03			4.43
Phila., Pa***	Delaware						.01	.01	.27	.25	1.31		.04					.03	.20						.03		2.77	.04					4.96
The Sea Coast.																																	
Asbury Park	Coast							.59	.11	.35	.21							.12	.06	.45		.26			.07			.47					2.69
Atlantic City***	do							.45	.24	.24	2.78		.02					.54	.01	T.					.23		.42	.11					5.04
Cape May City	do							1.14	.11	.19	1.27			T.	T.			.04	T.		.09					.04		.12		.20			3.20
Long Branch**	do							.44	.50	1.00	2.00				T.			.40	.06		.38	.03			.03		.37	.20					5.41
andy Hook***	do						T.	.62	.45	.35	1.14	.01	T.	.01				.11	.09	.02	T.	.02			T.		.48	.02					3.32

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.98	30.38	3	29.57	27	14.6	52	se.	10	79	72	82	64
Long Branch	29.96	30.34	3	29.55	21					78	68	71	
Moorestown										75	59	73	
New York, N. Y	29.97	30.34	3	29.54	21	13.6	52	se.	10	76	60	70	72
Philadelphia, Pa	29.99	30.38	3	29.61	26	11.5	51	nw.	26	68	51	61	72
Ridgefield	29.97	30.34	3	29.55	21								
andy Hook	29.96	30.33	3	29.51	27	10.9	37	sw.	26	78	65	78	71
Trenton	29.97	30.36	3	29.57	26	8.9	31	se.	10	70	51	63	76
Verona		30.36	3	29.55	26		45	nw.	27	72	58	71	71

Daily Temperatures for June, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	80	88	92	95	96	90	82	79	70	75	81	82	83	86	90	90	84	87	87	86	86	86	89	85	91	94	80	79	85	90	....	85.6
	Minimum	40	50	50	55	58	61	65	64	61	61	59	52	63	64	62	62	66	66	60	58	57	57	54	59	69	57	63	54	49	64	....	58.3
Charlotteburg	Maximum	73	82	89	91	92	90	86	78	75	68	78	79	79	78	85	84	85	82	82	82	82	82	82	82	86	89	87	78	79	86	....	82.4
	Minimum	36	46	43	60	61	55	65	49	61	59	63	44	61	64	67	61	61	64	69	55	57	64	50	50	68	51	69	54	42	59	....	56.3
Dover	Maximum	77	83	90	93	93	88	79	75	69	69	78	75	79	81	....	87	77	85	83	81	83	83	86	81	89	91	79	78	80	88	....	82.1ᵃ
	Minimum	40	50	49	61	62	64	65	53	62	60	53	49	54	63	....	63	65	67	62	57	58	66	53	56	63	56	61	55	47	50	....	57.0ᵃ
Layton	Maximum	79	83	91	94	90	87	77	75	69	69	80	80	80	82	89	85	81	83	83	78	84	81	84	83	87	90	78	76	81	80	....	81.9
	Minimum	33	43	45	49	54	56	64	49	55	60	48	49	60	65	57	58	66	66	56	56	53	63	45	62	61	51	65	51	42	58	....	54.3
Long Valley	Maximum	77	85	91	93	93	88	80	75	75	70	80	77	77	83	86	85	77	84	84	81	82	82	85	83	87	88	83	76	78	86	....	82.4
	Minimum	38	46	45	54	58	56	55	50	62	58	46	48	61	62	60	59	64	65	59	54	54	54	55	64	66	55	66	45	46	61	....	55.5
Newton	Maximum	77	84	90	90	92	87	81	77	70	68	76	79	78	82	87	85	81	82	83	83	82	82	85	80	88	90	78	75	80	86	....	81.9
	Minimum	40	53	65	65	62	62	64	56	59	56	50	48	60	52	60	62	63	63	59	59	57	59	66	59	65	58	65	54	49	63	....	57.8
Phillipsburg	Maximum	79	87	93	94	95	89	80	77	72	75	81	80	81	85	83	89	81	86	84	85	86	86	88	89	91	94	80	81	84	91	....	84.9
	Minimum	42	49	50	54	57	62	63	58	62	62	51	53	64	65	64	62	69	67	62	58	57	62	54	60	65	59	67	55	51	65	....	59.0
Sussex	Maximum	78	85	92	95	93	91	81	77	72	71	....	80	80	84	87	87	83	84	84	78	85	82	84	82	86	91	81	74	82	88	....	83.3ᵃ
	Minimum	35	46	46	50	54	57	65	50	61	60	....	46	59	60	60	61	63	65	58	58	54	51	53	53	66	51	64	50	44	58	....	55.1ᵃ
The Red Sandstone Plain.																																	
Bayonne	Maximum	70	71	85	87	88	84	80	74	67	64	68	72	74	78	82	83	80	78	83	80	80	79	83	84	86	88	85	77	76	84	....	79.0
	Minimum	52	63	64	64	65	64	62	60	60	68	60	62	60	62	62	65	63	61	65	64	61	60	64	65	67	68	66	65	64	68	....	62.8
Boonton§§	Maximum	77	79	88	91	90	86	78	79	71	70	81	77	79	81	84	84	81	84	83	81	82	82	85	80	88	90	79	77	81	87	....	81.8
	Minimum	32	55	46	54	57	58	67	53	59	62	57	49	59	60	61	61	60	66	61	57	54	59	57	55	64	57	67	58	47	61	....	57.1
Elizabeth	Maximum	79	77	94	96	96	63	87	79	70	71	80	76	78	84	90	89	82	87	89	87	88	88	89	87	96	96	88	83	83	92	....	85.8
	Minimum	40	52	50	58	62	63	68	61	63	62	56	59	60	62	62	62	63	67	63	60	58	59	57	60	70	61	67	58	54	61	....	59.9
Flemington	Maximum	79	68	94	96	95	90	84	76	73	77	85	81	83	85	88	88	82	88	87	85	89	85	91	85	93	95	93	83	85	91	....	86.5
	Minimum	41	51	49	54	58	59	66	57	63	61	50	52	60	62	62	62	64	65	61	57	56	59	55	58	71	59	67	56	52	64	....	58.4
Jersey City	Maximum	76	75	91	93	93	89	78	75	70	69	77	75	76	81	86	86	78	82	85	84	84	82	87	84	90	93	84	79	81	88	....	82.4
	Minimum	47	62	62	66	68	68	67	61	61	61	58	61	60	60	64	65	66	65	66	66	61	66	65	69	72	66	66	60	64	68	....	63.7
Lambertville	Maximum	72	86	90	92	93	89	76	76	71	74	81	77	80	82	86	87	78	84	83	82	82	86	84	88	92	79	79	83	88	86	....	82.9
	Minimum	44	56	56	58	61	65	62	57	62	60	50	54	60	63	63	63	61	68	62	58	60	58	62	70	61	67	55	56	68	65	....	60.2
Little Falls§§	Maximum	79	81	93	96	96	91	90	81	70	68	80	78	80	85	89	88	80	84	88	85	85	85	89	84	92	94	83	80	84	90	....	84.9
	Minimum	39	50	47	68	60	62	62	59	63	63	56	50	62	62	63	66	63	66	63	60	59	64	58	57	68	56	67	56	51	51	....	58.6
New Brunswick	Maximum	77	80	91	95	95	91	83	76	72	71	80	76	78	82	85	87	85	86	84	83	83	84	86	85	90	93	87	80	82	88	....	83.8
	Minimum	43	53	53	59	62	63	69	59	61	61	52	54	59	62	64	63	64	66	63	61	58	59	56	61	71	63	67	57	56	68	....	60.2
Paterson	Maximum	78	78	92	95	95	91	80	78	71	69	73	74	79	84	89	90	78	81	85	84	86	83	87	84	90	92	83	79	80	90	....	83.3
	Minimum	43	57	52	65	67	66	68	61	62	62	65	65	62	63	65	67	66	67	65	63	60	61	67	64	70	64	68	66	55	70	....	63.2
Plainfield	Maximum	76	78	92	94	94	91	78	76	70	70	77	75	76	81	86	86	80	85	86	84	85	83	87	84	91	93	84	80	83	90	....	83.1
	Minimum	39	50	50	59	62	60	65	66	63	61	55	51	59	60	62	62	64	66	62	69	57	61	64	58	70	57	64	57	51	65	....	59.0
Ridgefield	Maximum	76	77	92	94	93	90	80	75	70	69	76	76	78	83	88	89	78	82	87	82	85	85	88	84	91	93	82	79	81	90	....	83.1
	Minimum	42	55	52	64	67	66	68	60	63	63	58	55	62	61	63	64	65	67	64	63	59	60	57	60	69	60	67	56	52	67	...	61.0
Somerville	Maximum	78	89	94	98	96	93	83	79	73	74	82	79	80	85	89	87	82	87	87	85	84	84	88	85	93	94	84	82	84	91	....	85.6
	Minimum	37	49	48	53	57	60	63	56	63	59	51	50	60	62	62	60	64	69	60	56	55	58	54	56	64	58	55	53	49	71	....	57.1
South Orange	Maximum	75	75	92	94	95	94	84	72	68	67	75	75	76	77	85	85	83	83	85	85	84	83	87	87	90	90	88	80	79	91	....	82.8
	Minimum	40	54	49	55	68	60	65	68	62	62	55	51	58	61	60	61	61	67	61	58	54	58	59	57	68	60	67	54	50	64	....	58.6
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	75	73	87	90	90	86	77	73	68	65	74	74	75	79	84	84	74	79	83	81	81	80	84	81	87	80	78	76	77	85	....	79.6
	Minimum	48	63	62	66	68	68	67	62	61	59	58	61	60	60	64	66	66	65	67	67	62	67	65	70	73	66	67	60	64	70	....	64.1
The Southern Interior.																																	
Belleplain	Maximum	71	86	91	93	91	88	80	69	71	75	80	80	80	82	84	85	76	84	88	87	85	81	87	86	90	93	82	82	86	87	....	83.3
	Minimum	30	44	45	58	61	67	64	61	61	61	45	50	57	60	61	65	65	66	65	62	53	58	51	64	62	55	66	52	58	68	....	57.8
Bridgeton	Maximum	78	88	92	95	93	93	81	74	70	76	81	80	81	85	87	88	79	87	89	88	88	87	89	91	91	96	82	84	87	88	....	85.6
	Minimum	48	51	52	57	60	66	67	64	62	63	52	55	61	63	65	66	67	69	68	63	60	60	67	65	72	63	67	58	60	69	....	62.0
Burlington	Maximum	79	86	91	92	94	92	88	76	70	75	78	78	80	81	86	89	87	87	88	85	84	84	89	89	93	95	93	81	85	90	....	85.5
	Minimum	49	56	50	57	61	65	66	60	59	60	57	58	58	60	66	67	65	67	64	61	54	63	57	62	63	59	68	61	58	63	....	60.5
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	78	84	93	96	95	93	80	76	72	75	82	77	80	84	90	88	80	88	86	87	84	82	85	88	90	94	82	84	82	90	....	84.8
	Minimum	36	47	46	49	62	66	67	56	62	64	52	50	58	62	64	64	66	68	59	59	58	57	54	67	70	55	62	56	64	64	....	58.5
Indian Mills	Maximum	78	88	93	96	95	91	80	72	70	75	81	80	80	86	89	88	76	86	89	87	85	84	88	83	92	96	83	84	85	89	....	85.0
	Minimum	35	49	48	54	58	67	67	63	63	63	49	53	60	60	63	63	64	67	65	58	67	58	52	61	71	56	67	54	59	68	....	59.1
Lakewood	Maximum	77	76	91	94	94	91	84	70	70	71	76	75	77	80	87	88	81	86	85	84	84	82	87	85	91	89	86	82	82	89	....	83.1
	Minimum	39	50	50	59	63	64	66	61	62	62	49	52	59	60	54	62	62	68	63	58	57	58	54	61	70	57	67	57	54	63	....	58.7
Moorestown	Maximum	78	85	90	90	91	90	79	76	72	75	79	76	80	82	84	85	79	85	86	84	84	84	87	86	90	93	81	81	85	87	....	83.5
	Minimum	42	51	55	59	61	67	61	63	64	58	51	53	60	64	65	65	66	66	64	62	60	61	60	64	67	60	64	58	67	69	....	60.6
Pemberton	Maximum	76	81	89	92	94	93	89	74	71	75	82	79	79	83	88	89	83	86	87	84	82	84	88	84	92	95	85	80	83	90	....	84.6
	Minimum	39	49	50	54	59	66	68	64	63	62	53	53	60	61	64	63	65	67	66	60	60	59	56	60	72	60	67	57	57	68	....	60.1
Pleasantville§§	Maximum	75	71	85	91	85	78	76	66	72	69	75	72	71	76	79	82	74	81	84	86	83	83	85	80	91	86	82	76	87	81	....	79.4
	Minimum	33	49	47	58	62	64	55	54	62	63	50	51	61	61	63	65	66	65	66	64	59	60	54	64	70	59	69	55	61	68	....	59.1
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	76	86	91	93	92	89	78	76	72	74	80	77	79	82	86	86	79	86	85	83	82	82	86	88	90	94	81	80	81	89	....	83.4
	Minimum	46	58	58	62	64	68	65	62	62	60	56	56	59	63	65	65	66	69	65	64	62	63	60	66	72	66	65	60	59	69	....	62.5
Tuckerton	Maximum	78	85	90	95	88	81	79	68	69	71	75	72	72	72	82	82	77	80	82	88	82	87	88	87	90	88	85	80	80	79	....	81 1
	Minimum	88	50	50	55	55	64	65	60	61	61	49	52	60	60	62	64	65	70	65	60	58	57	54	67	70	58	65	54	60	60	....	59.0
Philadelphia, Pa.	Maximum	78	86	90	92	90	89	77	77	71	77	80	79	81	82	86	87	79	86	87	86	86	85	87	87	91	94	82	83	86	89	....	84.3
	Minimum	51	64	63	64	66	70	67	65	64	65	61	61	63	65	67	67	68	70	70	67	67	69	67	70	73	67	68	65	64	72	....	66.0
The Sea Coast.																																	
Asbury Park	Maximum	77	74	86	93	89	76	72	64	63	64	62	65	65	68	75	78	68	67	75	85	84	82	87	84	89	82	82	80	76	74	....	76.2
	Minimum	49	60	63	64	54	58	55	53	58	56	54	57	59	59	63	62	59	61	50	65	62	62	62	67	69	67	66	59	59	68	....	60.0
Atlantic City	Maximum	76	77	73	81	79	70	68	65	66	68	70	67	66	71	74	74	70	74	77	87	85	86	86	78	90	82	83	75	78	77	....	75.8
	Minimum	49	58	62	64	64	63	62	61	62	62	59	60	61	61	64	67	65	68	66	67	65	65	64	68	73	67	67	62	63	70	....	63.6
Cape May City	Maximum	76	81	79	87	76	74	72	66	66	70	74	74	72	73	75	74	71	75	78	86	84	84	85	79	88	79	83	77	77	76	....	77.0
	Minimum	49	56	56	61	62	64	63	61	61	58	55	58	61	62	62	65	66	67	66	65	64	66	61	66	70	67	65	65	66	65	....	62.3
Long Branch	Maximum	78	72	91	94	91	84	80	80	65	66	68	70	68	72	80	81	79	80	80	83	82	83	87	83	90	84	81	80	78	82	....	79.7
	Minimum	43	59	58	65	69	68	67	63	61	58	55	56	60	60	68	69	63	70	70	62	60	62	61	64	68	64	67	58	59	74	....	62.7
Sandy Hook	Maximum	73	69	90	91	89	86	79	68	66	65	68	67	68	76	81	85	72	77	82	83	82	80	85	80	89	87	80	78	75	82	....	78.4
	Minimum	51	58	57	64	67	68	65	60	59	59	56	59	59	60	65	68	65	66	67	68	65	66	64	70	71	67	68	62	63	69	....	63.5

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.288	.192	.352	.288	.320	.320	.090	.044	....	....	....	....	....	....	....	....	....	....	.068	.320	.320	.240	.208	.082	.272	.256	.032	.272	.240	.272	....	......
	Wind movement	58	70	42	42	74	87	46	48	90	86	42	68	51	52	47	73	81	57	34	45	65	26	38	31	31	77	52	41	66	80	....	1700
Runyon	Evaporation	.180	.180	.200	.210	.225	.225	.200	.150	.040	.060	.160	.140	.140	.160	.180	.190	.190	.200	.070	.180	.185	.180	.180	.180	.200	.190	.180	.160	.180	.180	....	5.095
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.§

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXV. July, 1930. No. 7

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The temperature continued to average above the normal as has been the case with all months of the present year, except April. It was the warmest July since 1921. However, the first half of the month was slightly below normal, due to considerable cloudiness and frequent showers, with the second half running continually above normal. The lowest temperatures occurred mostly on the 15th and 16th and ranged in the forties and low fifties. These were followed in less than a week by the highest temperatures for the month which were 100 degrees, or above, at nearly all stations, except at those along the Coast or in the Highlands, and were recorded on the 21st. The 19th, 20th and 21st were the hottest days.

Rain occurred frequently and in good amounts during the first half; during the second half what rain there was fell mostly during the 22d to 24th, with scattered showers on subsequent days. The extreme southern portion and the Highlands in the northwestern section experienced the least. In these sections the amount was only a little more than half of the normal. There is now an accumulated deficiency of precipitation for the year, resulting from the fact that every month, except June, had less than the normal amount.

A wind storm (apparently a tornado) occurred July 22d, the path extending from Red Lion to Seaside Park. The most damage was at Seaside Park, the remainder of the 40-mile long path being sparsely settled. On this same date a wind squall did damage estimated at $50,000 at and near Trenton. On July 11th Atlantic City and its vicinity experienced a hail storm of considerable intensity. Hail covered the ground and ranged in size from peas at Atlantic City to some stones as large as golf balls at Pleasantville. At the latter place there was much damage to truck crops, but little to property due to lack of wind.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 74.3°, which was 0.9° above normal. The highest temperature was 105° at Elizabeth on the 21st, and the lowest, 42°, at Charlotteburg on the 16th and at Layton on the 15th. The greatest daily range of temperature was 43° at Charlotteburg and Layton on the 17th. The highest monthly mean temperature was 77.2° at Bridgeton, and the lowest, 70.6° at Layton.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +1.9°; Red Sandstone Plain, +1.9°; Southern Interior, +2.0°; Sea Coast, +2.6°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 3.98 inches, which was 0.63 inch below normal. The greatest monthly precipitation was 6.45 inches, at Hightstown, and the least, 1.85 inches at Belleplain. The greatest amount of precipitation in any 24 consecutive hours was 2.90 inches at Phillipsburg on the 24th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or the normal number.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands, —5.39 inches; Red Sandstone Plain, —5.71 inches; Southern Interior, —4.28 inches; Sea Coast, —5.92 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 9 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 48 miles per hour from the north at Atlantic City on the 9th. High winds also occurred at various other stations on the 6th, 9th, 10th, 12th, 14th, 22d and 24th.

MISCELLANEOUS.

The percent of possible sunshine was 64, or 1 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.92 inches, which was 0.06 inch below normal. The highest reading was 30.19 inches on the 5th, at Ridgefield and Verona, and the lowest was 29.56 inches on the 21st at Verona.

The mean stage of the Delaware River at Phillipsburg was 1.3 feet, and the highest stage was 1.5 feet on ten days. The mean stage at Trenton was 0.7 foot, or 0 6 foot below normal. The highest stage was 1.3 feet on the 11th and 12th.

Dense fog was noted at a few stations on the 25th. Thunderstorms occurred on the following days: 1, 3, 4, 6, 7, 9, 10, 11, 12, 20, 21, 22, 23, 24, 25, 29 and 31. Light hail was reported at Burlington on the 29th, Flemington on 20th, Lakewood on 6th, Medford on 10th, Moorestown on 1st, 3d, 6th and 9th, Pemberton on 7th and Trenton on 9th. Heavy hail was reported at Atlantic City and Pleasantville on the 11th.

ERRATA.

May 1930. Minimum temperature at Lakewood, should be 35° on the 12th instead of 40° on the 27th and 31st.

COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	75.2	100	44	3.50	7.28	1.29	......	......	......	......
1886	73.0	98	48	4.91	7.95	2.98	......	......	......	......
1887	77.1	102	**54**	7.67	15.29	1.95	......	......	......	11
1888	71.1	95	45	3.50	7.03	1.25	......	......	8	9
1889	73.4	95	48	10.19	18.58	4.66	......	......	13	14
1890	72.5	101	39	5.62	7.55	3.60	12	11	8	9
1891	*70.1*	95	43	5.30	9.41	3.03	10	11	10	12
1892	74.3	105	44	4.03	7.96	2.38	12	14	5	8
1893	73.9	102	40	2.72	4.63	1.26	14	13	4	8
1894	75.7	106	44	1.66	5.00	*0.15*	14	12	5	6
1895	70.9	99	41	4.26	7.73	1.53	12	12	7	10
1896	75.0	98	47	5.50	13.29	2.45	13	10	8	13
1897	74.1	102	50	**11.42**	**20.80**	**6.11**	10	11	10	15
1898	75.3	**107**	38	4.96	11.72	2.23	11	13	7	10
1899	74.7	98	38	5.75	9.02	3.34	13	11	7	11
1900	75.9	104	42	4.74	7.21	1.11	15	12	4	11
1901	**77.3**	**107**	45	5.87	10.92	1.89	9	13	9	14
1902	73.0	100	43	4.78	9.92	1.83	10	12	9	13
1903	73.3	100	38	5.51	10.14	3.08	16	10	5	12
1904	72.3	98	42	4.87	8.06	2.41	13	10	8	13
1905	74.4	102	42	4.06	8.19	1.67	12	13	6	12
1906	72.8	*94*	46	5.58	13.25	3.44	11	14	6	12
1907	73.6	96	40	2.62	6.42	0.95	8	12	11	8
1908	75.6	106	42	4.70	8.12	1.97	12	13	6	9
1909	71.6	99	36	2.12	4.03	1.03	14	14	3	5
1910	75.3	99	42	*1.36*	5.33	0.22	12	12	7	5
1911	76.0	104	42	3.64	6.46	2.06	12	12	7	8
1912	73.7	100	36	3.86	9.91	1.01	14	10	7	9
1913	74.4	100	41	2.52	4.72	1.50	20	9	2	8
1914	71.5	97	40	6.05	8.57	1.94	9	11	11	15
1915	72.8	98	44	5.31	11.06	2.23	10	13	8	14
1916	74.4	97	45	5.40	9.01	3.15	11	9	11	12
1917	74.2	104	46	4.83	7.93	2.38	10	11	10	12
1918	72.2	104	39	3.93	13.60	1.20	17	9	5	8
1919	73.5	103	43	8.39	14.14	4.45	14	7	10	14
1920	71.7	96	42	5.76	16 25	1.20	17	10	4	11
1921	76.5	99	43	3.62	7.36	1.66	14	9	8	10
1922	73.0	98	44	5.79	9.26	2.29	13	9	9	13
1923	71.9	102	40	3.88	6.28	0.93	15	8	8	11
1924	71.6	98	41	2.59	5.08	0.84	19	8	4	6
1925	72.0	99	39	7.37	10.09	4.03	15	9	7	13
1926	73.0	105	40	5.46	8.51	1.29	16	7	8	12
1927	72.7	99	36	6.06	9.34	2.95	13	10	8	11
1928	74.2	96	41	6.86	10.22	2.21	16	8	7	12
1929	73.0	102	*33*	1.64	*3.93*	0.51	17	9	5	6
1930	74.3	105	42	3.98	6.45	1.85	16	9	6	10

W. B. O.Philadelphia-8-21-30-1050.

Climatological Data for July, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	75.6^{d}	+2.4	102^{b}	21	48^{d}	16	40^{d}	2.45	−2.53	0.90	0	8	21	6	4	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	71.1	+1.1	96	21	42	16	43	3.80	−1.03	0.78	0	10	16	4	11	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	....	......	......	50	15	....	2.36	−2.21	0.52	0	11	22	6	3	s.	Brice E. Riker.
Dover	Morris	600	46	72.2	+0.8	100	21	47	16	39	3.55	−1.72	0.96	0	9	7	16	8	......	William C. Harris
Layton	Sussex	480	29	70.6	−0.3	101	21	42	15	43	2.67	−1.59	0.95	0	8	18	4	9	w.	A. M. Depue.
Long Valley	Morris	520	....	71.8	....	98	21	44	16	40	2.33	....	0.54	0	7	23	5	3	w.	S. N .Dilts.
Newton	Sussex	769	46	73.5^{a}	+1.0	99^{a}	21	49^{a}	15	34^{a}	2.85	−2.11	0.96	0	8	12	9	10	sw.	Irving J. Kern.
Phillipsburg	Warren	363	47	74.4	+0.3	102	21	49	16	36	5.41	+0.56	2.90	0	9	19	9	3	......	Town Engineer.
Sussex	Sussex	442	35	71.6^{a}	−0.5	99^{a}	21	44^{a}	16	40^{a}	2.10	−2.30	0.61	0	7	14	8	9	w.	A. J. W. Mowatt
Means and extremes	......	......	....	72.6	+0.7	102	21	42	15†	43	3.06	−1.62	2.90	0	9	17	7	7	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	75.0	+1.0	97	21	58	15	21	4.27	−0.34	2.60	0	7	15	12	4	w.	William Mann.
Boonton	Morris	400	§40	72.2	....	98	21	46	16	37	3.00	−1.90	1.00	0	7	16	2	13	nw.	John Kline.
Chatham	Morris	185	26	......	....	......	......	......	......	....	5.14	+0.70	1.81	0	12	21	6	4	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	75.7	+0.4	105	21	53	17	39	4.05	−1.11	2.08	0	10	21	8	2	nw.	Union County Park Com.
Flemington	Hunterdon	140	§44	75.2	+0.6	102	21	50	16	39	5.51	+0.29	1.52	0	12	20	9	2	nw	Hiram E. Deats.
Jersey City	Hudson	10	32	76.2	+0.1	103	21	56	15	27	4.07	−0.37	2.00	0	11	12	11	8	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	43	74.2	....	99	21	51	15	33	4.43	−0.39	1.05	0	11	21	7	3	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	74.2	+0.4	102	21	49	16	37	4.25	−0.14	1.04	0	7	18	7	6	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	75.2	+1.2	102	21	53	16	33	4.08	−0.96	1.65	0	10	15	15	1	sw.	N. J. Experiment Station.
New Milford‡‡	Bergen	......	12	......	....	......	......	......	......	....	3.55	....	0.96	0	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	75.3	+0.9	100	21	55	16	33	2.98	−2.04	1.45	0	6	3	18	10	n.	Vincent A. Messineo.
Plainfield	Union	120	42	74.0	0.0	102	21	50	16	35	5.65	−0.18	1.50	0	9	12	13	6	w.	S. K. Pearson.
Ridgefield	Bergen	80	13	74.2	....	101	21	52	15†	31	3.62	....	1.24	0	8	13	14	4	nw.	George P. Kirsten.
Somerville, near	Somerset	70	47	74.6	+0.5	104	21	48	16	40	5.47	+0.36	1.81	0	11	14	7	10	nw.	Julius Gerlich.
South Orange	Essex	200	58	74.0	+0.8	102	21†	49	16	36	4.07	−0.94	1.63	0	11	15	10	6	w.	Everett W. Bird.
Verona††	Essex	490	4	72.1	....	96	21	53	15†	27	4.50	....	1.74	0	9	12	14	5	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	....	......	......	......	......	....	3.37	....	1.05	0	7	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	60	75.0	+1.2	99	21	56	15	23	5.05	+0.81	2.70	0	10	6	15	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.4	+0.6	105	21	46	16	40	4.24	−0.54	2.60	0	9	15	10	6	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	74.8	+1.0	103	21	49	13†	37	1.85	−2.26	0.53	0	9	8	18	5	sw.	A. F. Waldron.
Bridgeton	Cumberland	30	47	77.2	+0.5	103	21	54	15	31	1.91	−2.58	0.52	0	10	28	3	0	sw.	Bennett K. Matlack
Burlington	Burlington	12	§44	76.5	+1.5	102	21	53	16	32	4.01	−0.73	0.83	0	12	14	8	9	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	......	....	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	36	74.6	+0.2	102	21	50	15†	36	6.45	+1.46	2.00	0	9	24	3	4	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	75.1	+0.4	101	21	52	15†	34	2.84	−1.82	0.78	0	11	11	14	6	n.	James M. Armstrong.
Lakewood	Ocean	54	26	74.2	+1.4	99	21	52	16	31	5.29	+0.44	1.55	0	12	20	6	5	w.	R. W. Holman.
Moorestown	Burlington	......	67	74.9	+0.2	100	21	53	15	30	4.70	+0.02	1.50	0	12	14	7	10	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	....	......	......	......	......	....	4.59	+0.99	1.25	0	12	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	76.0	....	100	21	53	15	31	4.02	....	0.68	0	14	15	6	10	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	74.0	....	100	21	53	13†	30	4.37	+0.53	1.26	......	10	18	6	7	s.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	......	....	......	......	......	......	....	4.66	....	1.26	......	11	16	15	0	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	75.6	+1.1	101	21	56	15	27	3.94	0.00	1.91	0	12	10	10	11	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	5	......	....	......	......	......	......	....	4.27	....	1.27	.....	13	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	74.1	0.0	103	21	50	15	35	4.33	+0.45	1.45	0	11	16	4	11	nw.	John H. Brown.
Philadelphia, Pa	......	117	59	78.0	+1.8	103	21	58	15	25	4.06	−0.09	1.38	0	12	6	14	11	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	75.2	+0.7	103	21	49	13†	37	4.09	−0.32	2.00	0	11	16	8	7	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	74.4	+2.0	104	21	52	17	32	5.28	+0.74	1.85	0	12	22	7	2	nw.	Information Bureau.
Atlantic City	Atlantic	16	57	74.6	+2.5	102	21	57	15	27	4.19	+0.26	1.64	0	10	12	13	6	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	74.8	+1.4	100	21	58	15	28	2.77	−1.01	1.18	0	10	12	12	7	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	74.8	+2.7	102	21	55	15	29	6.08	+1.16	1.72	0	11	11	16	4	nw.	William D. Martin.
Sandy Hook	Monmouth	22	32	74.6	+0.9	96	21	60	15	23	3.94	−1.18	1.32	0	9	10	11	10	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.6	+1.9	104	21	52	17	32	4.45	−0.01	1.85	0	10	13	12	6	nw.	
For the State	......	......	....	74.3	+0.9	105	21	42	15†	43	3.98	−0.63	2.90	0	10	16	9	6	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for July, 1930

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.26	....	....	....	....	.09	....	....	.09	.68	.04	....	....	.20	....	....	....	....	....	....	....	.19	....	.90	....	....	....	....	T.	....	....	2.45
Charlotteburg	Passaic	.25	.35	.05	.48	....	.65	....	....	....	.42	....	....	....	.78	....	....	....	....	....	....	....	....	.33	.40	....	....	....	....	....	.09	....	3.80
Culvers Lake	Delaware	.41	.32	.03	.02	....	.21	....	....	.02	.15	.01	....	....	.42	....	....	....	....	....	....	....	.25	....	.52	....	....	....	....	....	....	....	2.36
Dover	Passaic	*	.64	....	....	....	.33	....	....	*	.70	.02	....	....	.75	....	....	....	....	....	....	....	.15	....	.96	....	....	....	....	....	....	....	3.55
Layton	Delaware	.51	.44	....	....	....	.28	....	....	T.	.43	.04	....	....	.34	....	....	....	....	....	....	....	.21	....	.42	....	....	....	....	....	....	....	2.67
Long Valley	....	.42	.12	T.	....	....	.36	....	....	....	....	T.	....	....	.40	....	....	....	....	....	T.	....	.34	....	.54	....	.15	....	....	....	....	....	2.33
Newton	Delaware	....	.37	.15	....	....	.20	....	....	....	.42	.03	....	....	.54	....	....	....	....	....	....	....	.18	....	.96	....	....	....	....	....	....	....	2.85
Phillipsburg	...do	.21	....	T.	....	...	.11	....	....	.55	.66	.04	....	....	.32	....	....	....	....	....	....	....	.51	....	2.90	....	.11	....	T.	....	....	....	5.41
Sussex	Hudson	....	.61	.25	....	....	.32	....	....	....	.34	....	....	....	.39	....	....	....	....	....	....	....	.11	....	.08	....	....	....	....	....	....	....	2.10
The Red Sandstone Plain.																																	
Bayonne	Coast	.27	T.	....	....	.60	.05	....	....	....	....	....	....	....	.20	....	....	....	....	....	....	....	.30	....	2.60	....	....	....	....	.25	....	....	4.27
Boonton ‖‖	Passaic	....	.40	....	.05	....	.19	T.	....	....	.46	....	....	....	T.	.41	....	....	....	....	....	....	T.	.49	....	1.00	....	....	....	....	....	....	3.00
Chatham ‖	...do	....	.97	....	.09	....	.27	.09	....	....	.44	....	.17	....	....	.29	....	....	....	....	....	....	....	1.81	.07	.83	....	.03	....	.08	....	....	5.14
Elizabeth	Coast	.17	.04	.01	....	....	.57	....	....	T.	.36	T.	....	....	.09	....	....	....	....	....	....	....	.45	.01	2.08	....	....	....	....	....	.27	....	4.05
Flemington	Raritan	.78	.02	T.	....	....	.50	.04	....	.11	1.41	.04	T.	....	.20	....	....	....	....	....	....	.17	1.27	....	.94	....	....	....	....	.03	....	....	5.51
Jersey City	Coast	.10	.06	.94	....	....	.15	....	....	.02	.36	.01	....	....	.07	....	....	....	....	....	....	....	.11	....	2.00	....	....	....	....	.25	....	....	4.07
Lambertville	Delaware	.83	....	.16	....	....	.23	.03	....	.68	1.05	.30	....	....	.14	....	....	....	....	....	T.	....	.30	....	.41	....	T.	....	....	.40	....	....	4.43
Little Falls ‖‖	Passaic	....	1.04	....	.83	....	.10	....	....	....	.31	....	....	....	....	.48	....	....	....	....	....	....	....	.61	....	.88	....	....	....	....	....	....	4.25
New Brunswick	Raritan	.35	.04	T.	....	....	.20	T.	....	T.	1.46	.02	....	....	.12	....	....	....	....	....	....	.02	1.65	.03	.19	T.	....	....	....	....	....	....	4.08
New Milford.**	Hackensack	.69	....	.34	....	.30	.04	....	....	.28	....	....	....	...	.45	....	....	....	....	....	....	....	.18	.09	.96	....	....	....	....	.22	....	....	3.55
Paterson	Passaic	....	....	.55	....	....	.13	....	....	....	....	....	....	....	.39	....	....	....	....	....	....	....	.45	....	1.45	....	....	....	....	.01	....	....	2.98
Plainfield	Raritan	.78	....	.01	....	....	1.50	....	....	.11	.78	....	....	....	.12	....	....	....	....	....	T.	....	.88	.03	1.44	....	T	....	....	T.	....	....	5.65
Ridgefield**	Hackensack	.42	....	1.24	....	....	.20	....	....	T.	.25	T.	....	....	.21	....	....	....	....	....	....	....	.45	....	.79	....	....	....	....	.06	....	....	3.62
Somerville	Raritan	1.02	.01	.03	....	....	.79	.01	....	.06	.97	.05	....	....	.11	....	....	....	....	....	....	T.	1.81	.61	....	....	....	....	....	....	....	....	5.47
South Orange	Rahway	.29	.09	.01	.10	....	.48	....	....	....	.37	.02	....	....	.23	....	....	....	....	....	....	....	....	1.63	.82	....	....	....	....	....	.03	....	4.07
Verona**	Passaic	1.74	....	.15	....	....	.22	....	....	.29	.09	T.	....	....	.33	....	....	....	....	....	....	....	.40	....	1.18	....	....	....	....	.10	....	....	4.50
Woodcliff Lake**	Hackensack	1.05	....	.53	....	.35	....	....	....	.44	....	....	....	....	.43	....	....	....	....	....	....	....	.18	....	.39	....	....	....	....	....	....	....	3.37
New York, N. Y***	Coast	.18	T.	.99	....	....	.17	....	....	.29	.08	.01	....	....	.06	....	....	....	....	....	....	....	.18	....	2.70	....	....	....	....	.39	....	....	5.05
The Southern Interior.																																	
Belleplain	Tuckahoe	....	.02	.16	....	....	.53	.30	....	....	.30	....	....	.. ..	.14	....	....	....	....	....	....	....	.06	....	T	....	.02	T.	....	....	.32	...	1.85
Bridgeton	Coast	....	.20	.20	....	....	.08	.35	....	....	.85	....	....	....	.03	....	....	....	....	....	....	....	....	.52	.10	.02	....	....	....	....	.06	....	1.91
Burlington	Delaware	.33	.83	.08	T.	....	.08	.03	....	....	.83	.02	T.	....	.44	....	....	....	....	....	....	....	....	.78	.01	.03	T.	....	....	....	.55	....	4.01
Clayton	Delaware	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Raritan	.82	....	.88	....	....	T.	.16	....	.80	.75	T.	....	....	.52	....	....	....	....	....	....	....	.47	....	2.00	....	....	....	....	.05	....	....	6.45
Indian Mills	Mullica	.12	.43	.23	....	....	.13	.78	....	....	....	.27	....	....	.09	....	....	....	....	....	....	.11	.16	....	.30	.22	....	....	....	....	....	....	2.84
Lakewood	Metedeconk	T.	.07	.07	.17	....	.85	.50	....	....	1.55	.02	.02	....	.30	....	....	....	....	T.	T.	....	.92	.07	.75	....	....	....	....	....	....	....	5.29
Moorestown ‖‖	Delaware	....	1.50	.15	.06	....	.20	1.40	....	....	.60	....	.20	....	....	.15	....	....	....	....	....	....	....	.17	.03	.21	.03	....	....	....	....	....	4.70
Northfield	Coast	....	....	.49	.05	....	.51	.45	....	....	1.25	....	.03	....	.03	....	....	....	....	....	....	....	.27	.01	1.22	.27	....	....	....	....	.01	....	4.59
Pemberton	....	.38	.37	.40	.31	....	.68	.40	....	....	.63	.02	.05	....	.04	....	....	....	....	....	....	....	....	.14	.01	....	.07	....	....	....	.52	....	4.02
Pleasantville ‖‖	Coast	....	....	....	.40	....	.16	.72	....	....	1.26	....	.44	....	....	.15	....	....	....	....	....	....	....	.83	.23	.07	T.	.11	....	....	....	....	4.37
Runyon	Coast	.62	.06	.05	.26	....	.76	....	....	....	1.16	.03	.04	....	.26	....	....	....	....	....	....	....	1.26	....	.16	....	....	....	....	....	....	....	4.66
Trenton***	Delaware	.17	.01	1.16	....	T.	.26	.01	....	1.19	.12	.10	....	T.	.36	....	....	....	....	....	....	....	.40	....	.05	....	T.	....	....	.11	....	....	3.94
Trenton No. 2 ‖‖	Delaware	....	.15	.04	.60	....	.03	.21	....	....	1.27	....	.31	....	.30	.14	....	....	....	....	....	....	....	.64	.01	.16	....	T.	....	T.	.41	....	4.27
Tuckerton	Coast	....	....	1.45	.15	....	.02	.45	....	....	1.15	.02	.03	....	.04	....	....	....	....	....	....	....	.75	....	....	....	....	.15	....	....	....	.12	4.33
Phila., Pa***	Delaware	.66	T.	1.02	....	.01	1.36	.02	....	.08	.08	.13	....	T.	.35	....	....	....	....	....	....	.. ..	.24	T.	.08	.03	....	T.	....	....	....	....	4.06
The Sea Coast.																																	
Asbury Park	Coast	.04	....	.18	....	....	1.21	.03	....	.06	.80	.02	.04	....	1.85	....	....	....	....	....	T.	....	.60	.02	.43	....	....	....	....	T.	....	....	5.28
Atlantic City***	...do	....	....	.30	....	....	1.04	....	....	.34	.70	.95	....	....	.02	....	....	....	....	....	....	....	.42	....	.24	....	....	.02	....	T.	....	.16	4.19
Cape May City	...do	....	T.	.57	.03	....	T.	.09	....	....	1.18	....	....	....	.06	....	....	....	....	....	....	....	.05	T.	.21	.03	....	....	....	....	.24	.31	2.77
Long Branch**	...do	.16	....	.19	....	....	1.36	.36	....	.76	.28	1.06	....	....	.40	....	....	....	....	....	T.	....	.66	....	.76	...	....	.09	....	....	....	....	6.08
Sandy Hook***	...do	.52	.01	.43	....	....	.48	....	....	.40	.30	T.	....	....	.24	....	....	....	....	....	T.	....	1.32	....	.24	....	....	T.	....	....	....	....	3.94

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip- tation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.92	30.17	5	29.68	14	12.4	48	n.	9	78	66	78	64
Long Branch	29.92	30.17	5	29.63	21	......	......	......	......	75	60	70	......
Moorestown	......	......	......	......	......	......	......	......	......	79	58	76	......
New York, N. Y	29.92	30.18	5	29.62	21	11.2	36	nw.	3	73	58	66	70
Philadelphia, Pa	29.95	30.21	4	29.68	14	10.2	44	nw.	6	70	49	58	62
Ridgefield	29.92	30.19	5	29.62	21	......	......	......	......	......	......	......	......
Sandy Hook	29.90	30.17	5	29.62	21	9.9	44	nw.	22	77	62	76	65
Trenton	29.92	30.18	5	29.66	21	7.5	47	nw.	22	73	51	65	64
Verona	29.91	30.19	5	29.56	21	4.8	22	sw.	21	73	53	72	......

Daily Temperatures for July, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	84	....	86	....	85	87	89	85	92	84	85	85	87	80	84	88	92	97	101	95	102	92	89	90	94	95	95	84	91	84	89	89.8
	Minimum	69	....	60	....	52	69	....	60	57	61	62	59	53	67	49	48	55	....	66	72	66	70	60	65	62	63	72	65	69	60	67	61.8
Charlotteburg	Maximum	85	82	81	77	79	81	83	82	83	80	80	80	80	78	78	82	86	86	94	95	96	94	89	85	89	90	89	87	87	86	84	84.8
	Minimum	68	59	57	63	58	58	62	61	54	57	48	60	48	63	48	42	43	55	60	66	61	70	53	58	59	58	62	60	65	66	48	67.4
Dover	Maximum	81	85	77	82	81	82	86	83	87	82	81	79	80	77	81	86	88	85	98	93	100	86	82	84	82	91	91	80	88	85	85	84.8
	Minimum	65	62	59	55	51	55	62	61	67	60	53	55	52	58	51	47	56	57	69	73	65	67	61	62	62	62	65	64	66	68	53	69.6
Layton	Maximum	78	81	78	80	80	84	84	81	85	82	82	77	82	75	80	84	91	90	96	93	101	82	86	87	92	94	89	81	91	83	76	84.6
	Minimum	65	59	56	48	45	64	65	62	67	52	51	53	50	62	42	44	48	64	63	67	62	62	60	68	60	57	65	60	67	65	49	56.6
Long Valley	Maximum	86	82	78	81	81	83	84	81	86	81	83	77	83	76	79	83	89	85	96	94	98	88	86	83	90	89	91	82	89	82	85	84.9
	Minimum	66	62	60	56	48	59	60	60	55	55	61	52	50	65	53	44	49	55	64	69	64	71	60	62	62	69	68	63	67	67	51	58.6
Newton	Maximum	83	82	78	79	81	82	84	82	88	80	81	77	82	76	77	83	89	87	96	94	99	82	....	81	92	94	95	91	99	88	87	85.6
	Minimum	64	59	58	52	60	62	59	69	59	57	54	58	54	63	49	59	55	61	68	74	65	67	....	66	61	63	72	70	64	66	65	61.4
Phillipsburg	Maximum	85	84	82	82	82	82	88	86	90	84	85	81	86	77	81	84	91	82	92	93	102	89	90	87	94	92	94	75	91	86	86	86.6
	Minimum	69	63	62	56	54	66	63	59	59	62	56	58	54	64	51	49	65	60	66	72	67	70	66	68	65	66	72	67	70	61	69	62.2
Sussex	Maximum	83	82	78	80	80	82	83	81	86	82	81	81	82	81	80	84	89	90	95	93	99	93	....	89	91	94	88	81	89	83	85	85.6
	Minimum	67	69	67	50	48	64	68	61	55	60	52	62	51	65	50	44	61	57	67	66	63	65	....	58	64	68	66	61	68	65	60	57.7
The Red Sandstone Plain.																																	
Bayonne	Maximum	84	87	84	80	86	82	80	80	84	79	80	78	77	78	77	78	82	90	90	90	97	94	82	80	88	87	86	84	83	81	80	83.6
	Minimum	69	66	64	62	72	67	64	65	67	60	64	62	62	63	58	60	64	70	74	74	76	73	68	64	67	70	69	66	66	65	68	66.4
Boonton§§	Maximum	85	85	79	83	80	82	85	87	86	81	80	78	82	77	81	83	85	84	96	92	98	87	88	85	92	90	89	77	85	82	83	84.7
	Minimum	69	60	61	56	52	60	64	60	56	61	52	56	53	62	50	46	52	58	64	72	65	68	62	62	59	60	67	65	66	60	52	59.7
Elizabeth	Maximum	91	87	80	85	85	84	89	87	90	84	84	82	86	80	81	86	92	88	101	97	105	95	86	87	94	90	93	87	88	86	83	88.2
	Minimum	67	63	66	60	56	64	65	62	59	62	57	58	57	66	54	64	53	61	70	74	69	70	64	66	64	66	73	69	68	63	58	63.2
Flemington	Maximum	88	89	80	85	84	88	89	85	92	82	85	81	86	84	82	89	91	85	101	95	102	97	90	86	95	92	94	86	91	85	81	88.4
	Minimum	65	64	62	58	55	62	63	60	58	62	55	57	55	66	53	50	55	60	68	73	67	68	64	66	65	66	71	67	67	64	58	62.1
Jersey City	Maximum	88	84	80	79	84	84	87	84	88	80	82	80	81	79	79	82	88	88	99	94	103	88	85	85	92	91	93	83	88	84	83	86.0
	Minimum	67	65	58	60	62	66	67	67	66	63	63	64	67	61	56	60	63	67	73	79	76	70	68	65	69	74	75	67	69	66	69	66.6
Lambertville	Maximum	87	83	79	80	81	85	85	81	88	80	82	78	85	84	79	85	89	87	97	92	99	91	88	86	92	92	92	80	90	82	86	85.9
	Minimum	66	54	60	55	57	65	64	59	63	60	69	60	56	61	61	62	69	62	70	73	69	69	64	65	67	67	73	66	67	62	69	62.4
Little Falls§§	Maximum	90	86	80	84	82	85	88	84	89	83	83	81	84	80	81	86	90	88	100	97	102	88	89	87	95	94	92	79	89	86	85	87.3
	Minimum	69	60	61	66	55	62	62	60	57	60	64	55	56	66	53	49	56	62	68	70	67	71	63	64	62	62	68	67	67	62	65	61.2
New Brunswick	Maximum	90	84	82	81	81	84	86	84	89	79	83	79	85	82	79	83	88	86	100	98	102	99	84	84	93	92	92	87	87	85	84	86.8
	Minimum	65	65	64	58	56	65	65	62	61	62	57	60	56	66	54	53	58	61	72	73	69	68	66	67	66	68	74	68	67	65	68	63.5
Paterson	Maximum	88	84	83	80	76	82	87	83	84	87	80	80	83	78	80	82	89	90	98	94	100	91	86	85	91	89	91	86	86	84	82	85.8
	Minimum	68	62	61	58	60	66	65	64	62	62	60	60	74	66	60	55	60	62	65	75	72	72	64	66	67	68	72	69	69	66	60	64.8
Plainfield	Maximum	89	84	80	79	84	84	88	84	88	81	82	80	82	79	79	83	89	89	99	93	102	87	86	85	92	91	93	83	88	83	83	86.1
	Minimum	66	65	56	56	59	63	63	62	63	61	56	56	55	66	53	50	56	69	70	72	67	72	64	65	64	63	72	67	67	62	56	61.8
Ridgefield	Maximum	88	85	77	80	81	83	87	84	86	81	82	82	82	78	81	82	90	80	98	96	101	88	87	86	92	89	91	78	86	85	82	85.4
	Minimum	68	62	63	57	68	66	65	61	61	60	68	69	67	59	62	62	60	65	71	73	70	73	64	66	64	64	71	68	68	63	67	63.1
Somerville	Maximum	89	86	81	85	84	84	88	84	92	81	84	80	86	80	82	88	92	89	101	98	104	96	89	88	94	92	95	75	90	85	88	88.1
	Minimum	66	64	61	55	54	62	63	61	58	61	66	56	54	64	60	48	62	69	66	72	67	68	64	66	64	64	70	68	68	62	65	61.2
South Orange	Maximum	90	86	85	77	72	81	87	87	90	89	84	84	82	79	80	82	91	91	94	94	102	102	85	85	94	94	83	77	87	86	85	86.6
	Minimum	66	60	63	54	68	60	62	58	69	61	64	64	65	65	53	49	65	60	68	72	66	72	63	64	64	62	69	67	67	61	65	61.6
Verona	Maximum	84	81	74	77	77	79	83	78	84	77	78	76	80	75	74	80	85	83	94	89	96	83	82	82	88	87	88	75	83	80	80	81.7
	Minimum	63	60	59	57	65	65	63	62	62	61	69	58	57	68	53	63	60	65	73	72	69	66	64	66	65	65	73	68	67	63	58	62.5
New York, N. Y	Maximum	84	82	76	76	80	81	84	80	84	79	80	77	80	75	77	78	84	84	96	92	99	88	84	82	90	88	89	81	84	82	81	83.1
	Minimum	67	65	58	61	62	67	67	67	67	63	64	64	67	61	56	60	63	67	74	80	76	70	68	65	69	76	76	67	69	67	69	66.8
The Southern Interior.																																	
Belleplain	Maximum	86	86	80	81	78	85	88	84	88	79	80	85	86	80	77	82	84	90	96	98	103	98	90	89	95	96	97	87	89	86	88	87.4
	Minimum	67	68	61	53	58	62	66	66	55	61	60	53	49	68	60	49	54	61	71	73	70	71	66	68	59	68	76	69	68	64	51	62.1
Bridgeton	Maximum	88	86	82	82	79	87	88	85	89	82	87	83	88	80	82	86	87	91	98	97	103	99	92	88	94	97	96	94	90	88	90	89.0
	Minimum	70	65	62	59	58	67	65	60	62	62	61	66	57	70	54	66	61	65	73	76	73	72	68	68	66	71	79	70	70	67	61	65.5
Burlington	Maximum	89	85	84	77	82	85	88	88	89	88	84	82	85	83	78	83	88	88	98	99	102	100	93	86	96	96	96	94	89	88	87	88.7
	Minimum	68	64	63	59	56	66	63	63	60	60	60	63	60	65	56	63	67	60	73	76	70	73	69	68	65	68	73	70	70	66	57	64.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	92	90	82	83	82	88	86	82	90	80	84	80	88	78	78	85	90	89	99	93	102	94	88	86	94	91	94	77	89	84	87	87.3
	Minimum	66	60	62	56	55	65	64	58	57	62	58	66	52	64	60	60	56	69	72	72	67	70	65	64	64	66	73	66	67	64	66	61.8
Indian Mills	Maximum	90	83	78	82	80	87	86	82	90	79	85	74	86	77	79	86	88	89	99	98	101	94	89	82	94	99	95	82	90	84	88	87.0
	Minimum	69	64	61	66	53	63	63	59	59	60	68	62	53	70	52	62	55	61	73	75	68	71	66	69	65	67	76	70	70	66	54	63.2
Lakewood	Maximum	88	87	86	80	81	85	87	84	88	82	84	82	84	78	77	80	86	87	97	93	99	88	82	82	92	89	92	89	85	85	85	85.9
	Minimum	70	62	63	68	65	63	63	58	60	60	58	58	54	67	64	52	58	69	73	73	68	71	64	66	64	62	67	69	69	65	56	62.5
Moorestown	Maximum	87	82	78	79	79	86	86	85	88	80	83	79	84	76	77	82	86	87	96	96	100	92	87	85	93	95	95	77	88	86	86	86.8
	Minimum	67	64	60	58	57	66	65	62	63	60	61	61	66	61	63	64	60	63	74	76	70	71	65	68	67	69	74	70	69	63	58	64.0
Pemberton	Maximum	97	84	84	81	89	84	85	85	86	86	82	80	85	76	78	84	86	89	97	95	100	97	87	86	94	94	93	85	89	84	86	87.4
	Minimum	68	64	62	57	68	65	65	63	60	62	60	62	66	70	53	54	68	62	73	76	69	73	66	70	66	69	77	71	69	64	57	64.6
Pleasantville§§	Maximum	80	85	75	78	77	84	86	83	88	78	82	79	78	78	74	76	82	83	93	96	100	90	83	83	88	86	95	77	81	84	83	83.4
	Minimum	70	62	62	57	55	67	66	57	69	60	69	62	53	71	53	65	58	66	71	75	70	77	67	69	66	69	74	73	70	70	66	64.5
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	88	84	76	81	80	86	86	82	87	80	83	79	85	77	78	84	88	86	98	94	101	92	88	84	93	93	92	75	87	83	85	85.6
	Minimum	66	66	60	59	61	66	65	63	61	62	62	63	60	60	56	58	62	65	74	77	74	69	68	70	67	71	78	69	69	67	62	65.5
Tuckerton	Maximum	82	88	80	78	79	85	87	87	90	78	78	81	82	81	73	79	82	85	98	98	103	91	83	82	92	90	98	79	84	88	86	85.4
	Minimum	68	63	60	66	65	66	64	57	58	60	68	69	54	60	50	56	68	65	70	75	68	71	67	69	63	67	70	70	68	68	67	62.8
Philadelphia, Pa	Maximum	88	83	79	82	78	88	87	83	88	82	86	81	84	79	78	83	86	86	100	99	103	93	90	86	95	97	95	81	89	86	88	87.2
	Minimum	70	68	65	62	66	64	67	68	67	65	66	66	67	64	58	63	65	69	75	78	78	75	72	71	70	77	80	71	71	70	68	68.9
The Sea Coast.																																	
Asbury Park	Maximum	73	80	78	77	78	81	87	84	88	77	82	81	79	78	74	72	84	77	100	100	104	90	90	80	88	83	94	82	80	84	78	83.3
	Minimum	63	60	62	72	69	64	67	64	64	64	63	64	60	60	60	68	62	66	70	73	74	70	68	59	68	72	74	70	70	70	64	65.6
Atlantic City	Maximum	77	81	73	78	76	78	89	85	88	77	81	82	78	77	72	76	77	79	83	95	102	87	82	80	84	84	87	78	81	85	80	81.6
	Minimum	49	66	63	61	63	66	69	66	65	62	63	68	64	62	57	62	68	70	71	75	75	72	70	70	70	75	73	71	72	72	69	67.7
Cape May City	Maximum	76	83	77	79	75	86	88	84	85	79	79	81	77	80	74	78	75	84	88	96	100	98	83	78	86	81	90	80	82	84	80	82.7
	Minimum	65	65	64	60	63	66	68	64	68	64	65	64	61	63	58	62	66	69	72	76	76	70	70	69	68	70	70	71	70	68	65	66.8
Long Branch	Maximum	80	81	74	83	79	82	92	82	84	74	75	78	83	87	74	77	84	83	97	93	102	85	80	83	92	85	94	76	84	84	82	83.6
	Minimum	67	63	60	60	62	63	68	67	66	64	62	61	67	66	56	63	61	65	73	76	73	70	65	68	67	72	74	69	78	66	62	66.2
Sandy Hook	Maximum	83	84	75	78	80	84	85	80	86	77	80	77	78	75	77	78	83	83	94	93	96	82	80	79	91	84	90	72	82	83	79	82.2
	Minimum	66	66	62	64	64	68	68	67	66	64	64	65	65	64	60	63	64	67	75	75	73	68	68	68	68	72	72	68	69	70	68	67.1

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville••	Evaporation	.288	.224	.368	.272	.160	.112	.320	.272	.800	.288	....	.320	.240	.086	.320	.144	.128	.192	.400	.192	.362	.610	.198	.214	.160	.302	.288	.192	.224	.288	.318	......
	Wind movement	53	42	41	50	*	*	111	33	74	54	44	67	52	53	44	40	37	37	31	72	38	56	47	36	44	49	42	67	62	45	60	141
Runyon	Evaporation	.120	....	....	.080	.160	.110	.210	.180	.180	.160	.160	.160	.160	.180	.200	.250	.220	.150	.230	.220	.220	.600	.120	.160	.120	.180	.170	.160	.120	.180	.200	......
	Wind movement	....	....	....	....	....	....	....	16	23	19	35	26	26	41	20	23	32	22	41	31	31	16	28	8	17	18	20	29	48	21	20	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. ••Observations taken in the morning, and entered on preceding day. † Pan frozen.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXV. August, 1930. No. 8

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

While the average temperature for the State was below normal (this being only the second month during the past ten months that this was the case) the departure was so small that the month may be classed as normal in that respect. The highest points reached by the thermometer were generally in the higher nineties, with three stations recording 100 degrees or over, and these were registered on the 3d, 5th, and 9th. The lowest recorded were mostly in the higher thirties and forties in the northern sections, and in the forties and low fifties in the southern. These were observed on the 13th in nearly all cases, and the minimum for the State, 34 degrees at Layton, equalled the record for August lows, which was set in 1895 and 1909.

The average rainfall was about two-thirds of the normal amount. It ranged from one-half of the normal along the sea coast to four-fifths of it in the Highlands section in the extreme northwestern section. Practically all of it occurred during the latter half of the month as follows: From the 15th to 18th, inc., and on the 20th, in northern districts; on the 22-23d over the Coast region; on the 23d over the State as a whole, and on the 23d-24th in the northeastern section. The heaviest monthly averages occurred in the northeastern quadrant and the lightest along the southern coast and in the extreme western interior. The average of six days with rain equalled the smallest on record which occurred in both 1909 and 1919.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 71.1°, which was 0.7° below normal. The highest temperature was 101° at Bridgeton on the 5th and at Layton on the 3d and 4th, and the lowest, 34°, at Layton on the 13th. The greatest daily range of temperature was 47° at Layton on the 13th. The highest monthly mean temperature was 74.2° at Bridgeton, and the lowest, 68.0° at Layton.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +1.6°; Red Sandstone Plain, +1.6°; Southern Interior, +1.6°; Sea Coast, +2.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 3.32 inches, which was 1.61 inches below normal. The greatest monthly precipitation was 5.58 inches, at Woodcliff Lake, and the least, 1.92 inches at Cape May City. The greatest amount of precipitation in any 24 consecutive hours was 2.97 inches at Paterson on the 22-23d. The mean of the number of days on which 0.01 inch or more of precipitation fell was 6, or 4 less than normal.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands, —6.33 inches; Red Sandstone Plain, —7.06 inches; Southern Interior, —6.28 inches; Sea Coast, —8.44 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 2 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 56 miles per hour from the northeast at Sandy Hook on the 23d.

MISCELLANEOUS.

The percent of possible sunshine was 66, which was normal.

The mean atmospheric pressure, reduced to sea level, was 29.99 inches, or 0.01 inch below normal. The highest reading was 30.35 inches on the 13th at Ridgefield and the lowest was 29.59 inches on the 23d at Sandy Hook.

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The mean stage of the Delaware River at Phillipsburg was 0.5 foot, and the highest stage was 1.5 feet on the 25th. The mean stage at Trenton was 0.1 foot, which was 1.0 foot below normal. The highest stage was 0.5 foot on the 27th, however on 18 days the readings ranged from zero of the gage to 0.2 foot below zero.

Thunderstorms were not numerous at any station but they occurred, over the State as a whole, on 15 days, namely: 1, 9, 10, 15, 16, 17, 18, 20, 22, 23, 26, 27, 28, 29, and 30. Dense fog was general on the 25th and occurred in various sections on the 4th, 8th, 9th, 16th, 18th, 26th and 29th. Light hail was reported on the 16th at Ridgefield and moderate hail on the 27th at Moorestown and Ringoes. Light frost occurred at Layton on the 13th and at Plainfield on the 12th.

ERRATA.

July 1930. In the General Summary the date of the wind storm at Seaside Park should be the 21st instead of 22d.

COMPARATIVE DATA FOR AUGUST

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	71.7	95	40	6.11	10.09	3.47	......	......	......	......
1886	69.5	96	42	2.81	5.36	1.10	......	......	......	......
1887	70.4	94	42	3.76	7.34	2.09	......	......	......	8
1888	72.5	98	41	6.13	10.53	2.55	......	......	8	9
1889	69.6	91	45	5.13	9.06	1.93	......	......	8	10
1890	71.5	99	40	4.90	7.51	2.89	8	15	8	11
1891	72.8	100	**46**	5.32	8.89	2.58	8	11	12	13
1892	73.4	99	**46**	3.63	5.65	0.72	12	13	6	9
1893	72.8	98	38	6.52	11.94	3.55	14	11	6	8
1894	70.9	97	44	2.58	9.28	0.15	13	12	6	7
1895	74.2	102	*34*	2.53	5.06	*0.02*	16	12	3	7
1896	73.6	105	39	1.83	*3.27*	0.50	17	10	4	7
1897	71.0	91	41	4.39	8.69	2.07	14	12	5	9
1898	74.8	98	42	5.36	9.28	2.70	12	12	7	10
1899	72.3	99	39	4.36	9.70	2.16	10	12	9	9
1900	**76.3**	104	41	2.68	4.56	0.70	15	11	5	10
1901	73.8	98	44	**9.43**	15.80	4.88	12	10	9	11
1902	70.1	93	40	3.91	10.67	1.31	15	13	3	9
1903	68.4	98	39	6.95	14.54	4.30	10	10	11	13
1904	70.8	92	37	6.62	13.01	2.65	15	10	6	9
1905	71.1	95	38	5.72	9.88	3.51	13	10	8	12
1906	74.6	97	42	5.95	**17.91**	2.21	10	11	10	13
1907	70.5	96	39	3.45	7.61	1.79	14	12	5	10
1908	70.6	103	36	5.05	9.23	2.43	11	10	10	10
1909	70.2	100	*34*	4.59	12.94	1.41	14	9	8	6
1910	70.4	92	36	3.78	8.46	1.76	9	10	12	10
1911	72.1	101	39	8.91	14.74	**5.31**	10	11	10	11
1912	70.0	95	35	3.42	7.62	1.19	12	13	6	10
1913	71.7	100	38	4.06	10.21	1.93	18	9	4	10
1914	73.3	98	**46**	3.15	6.53	1.04	13	12	6	9
1915	70.9	98	41	7.73	10.92	4.02	11	11	9	13
1916	73.2	100	40	*1.34*	4.15	0.27	20	7	4	6
1917	74.0	103	42	2.21	5.68	0.86	18	9	4	8
1918	74.4	**108**	40	1.85	4.25	0.34	18	7	6	7
1919	69.9	98	38	6.89	12.88	3.09	13	10	8	13
1920	72.3	94	42	6.10	10.60	2.94	8	11	12	17
1921	69.8	97	38	4.32	8.01	2.05	18	7	6	9
1922	71.2	96	39	4.03	6.78	2.18	13	9	9	12
1923	70.8	98	35	2.44	4.81	1.23	17	8	6	8
1924	71.9	102	38	4.40	9.48	1.82	18	8	5	8
1925	71.0	93	35	2.10	4.12	0.94	20	6	5	7
1926	72.8	101	38	6.58	8.84	3.74	11	9	11	14
1927	*67.1*	*89*	37	8.55	12.87	2.88	11	9	11	12
1928	74.5	99	45	6.72	14.26	3.33	12	8	11	13
1929	69.8	97	39	2.58	4.86	0.88	16	8	7	9
1930	71.1	101	*34*	3.32	5.58	1.92	16	9	6	6

W. B. O. Philadelphia 9-18-30-1050.

Climatological Data for August, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr: Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Precipitation in inches: Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	No. of days: Precipitation .01 inch ormore	Clear	Pt. cloudy	Cloudy	Prevailing direction of wind	Observers
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	71.3^{a}	+0.3	99^{a}	3†	40^{a}	13	42^{a}	3.37	−1.24	2.12	0	4	23	4	4	....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	68.6	+0.7	96	3	36	13	44	3.92	−0.70	2.15	0	7	21	4	6	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	.....	......	......	......	45	13	....	3.11	−1.31	1.82	0	5	25	4	2	e.	Brice E. Riker.
Dover	Morris	600	46	69.2	+0.1	97	5	41	13	39	3.14	−1.62	2.10	0	5	5	19	7	......	William C. Harris
Layton	Sussex	480	29	68.0^{b}	−0.4	101^{b}	3†	34^{b}	13	47^{b}	4.13	+0.23	2.18	0	5	15	10	6	sw.	A. M. Depue.
Long Valley	Morris	520	....	68.4	....	95	4†	40	13	39	3.07	....	2.11	0	3	22	6	3	nw.	S. N .Dilts.
Newton	Sussex	769	46	70.5	+0.1	99	3†	41	13	37	3.85	−0.57	2.34	0	6	13	8	10	sw.	Irving J. Kern.
Phillipsburg	Warren	363	47	71.5	−0.3	98	4†	43	13	39	2.04	−2.58	1.31	0	5	22	6	3	......	Town Engineer.
Sussex	Sussex	442	35	69.2	−0.3	99	3	35	13	46	4.49	+0.23	2.61	0	7	12	12	7	w.	A. J. W. Mowatt
Means and extremes	......	......	....	69.6	0.0	101	3†	34	13	47	3.46	−0.94	2.61	0	5	18	8	5	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	73.0	+0.8	94	5	57	13	22	3.20	−1.86	2.10	0	4	21	5	5	w.	William Mann.
Boonton	Morris	400	§40	69.0	....	95	9	41	13	39	2.81	−2.27	1.35	......	6	15	5	11	sw.	John Kline.
Chatham	Morris	185	26	.....	....	.....	.....	.....	.....	....	4.40	−0.01	2.70	0	9	23	4	4	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	72.4	−1.0	98	5	46	13	33	3.00	−1.29	2.06	0	7	21	5	5	sw.	Union County Park Com.
Flemington	Hunterdon	140	§44	72.0	−0.5	100	5	43	12†	41	2.50	−2.21	1.96	0	5	23	5	3	nw.	Hiram E. Deats.
Jersey City	Hudson	10	32	74.0	−0.1	96	5	55	23	24	3.30	−1.23	2.50	0	7	9	15	7	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	43	71.4	....	95	3†	45	13	36	3.13	−1.53	2.23	0	7	23	3	5	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	71.6	−1.6	99	9	43	13	33	5.43	+1.03	2.63	0	8	16	9	6	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	71.8	−0.3	96	5†	44	13	34	2.88	−2.27	2.26	0	4	17	10	4	s.	N. J. Experiment Station
New Milford‡‡	Bergen	....	12	.....	....	.....	.....	.....	.....	....	4.75	....	2.02	......	7	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	71.6^{a}	−0.6	95	3	51^{a}	12	26^{a}	4.88	+0.15	2.97	0	6	3	19	9	s.	Vincent A. Messineo.
Plainfield	Union	120	42	70.8	−1.0	97	5	44	12	33	2.70	−2.51	1.94	0	4	11	14	6	sw	S. K. Pearson.
Ridgefield	Bergen	80	13	71.3	....	97	5	46	13	31	4.40	....	2.76	0	6	10	12	9	s	George P. Kirsten.
Somerville, near	Somerset	70	47	71.4^{a}	−1.0	99^{a}	9	44^{a}	12†	37	2.91	−1.93	1.92	0	5	19	8	4	sw.	Julius Gerlich.
South Orange	Essex	200	58	70.5^{b}	−0.4	96^{b}	5†	46^{b}	12†	36^{b}	3.48	−1.60	2.40	0	5	13	11	7	w.	Everett W. Bird.
Verona††	Essex	490	4	70.4	....	92	9	47	13	30	3.45	....	......	0	....	....	....	....	......	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	.....	....	.....	.....	.....	.....	....	5.58	....	1.64	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	60	72.8	−0.3	93	5	55	23	20	3.43	−0.90	2.66	0	9	7	16	8	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	71.5	−0.6	100	5	41	13	41	3.69	−1.35	2.97	0	6	16	9	6	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	70.4	−2.2	97	5	37	13	44	3.09	−1.21	1.13	0	6	13	9	9	s.	A. F. Waldron.
Bridgeton	Cumberland	30	47	74.2	−0.8	101	5	50	13	34	2.31	−2.28	0.88	0	5	23	5	3	sw.	Bennett K. Matlack
Burlington	Burlington	12	§44	73.0	−1.2	97	5	46	13	37	4.17	−1.28	2.04	0	6	11	11	9	sw.	Public Service Power Co.
Clayton	Gloucester	130	30	.....	....	.....	.....	.....	.....	....	......	....	......	......	....	....	....	....	......	Harry P. Campbell.
Hightstown	Mercer	120	36	70.6	−1.7	96	3	40	13	40	3.37	−1.21	2.56	0	3	22	5	4	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	71.4	−1.2	97	3†	41	13	41	3.73	−2.20	1.92	0	6	9	17	5	e.	James M. Armstrong.
Lakewood	Ocean	54	26	70.0	−1.1	95	3†	45	13	32	2.55	−3.50	1.70	0	3	20	4	7	ne.	R. W. Holman.
Moorestown	Burlington	......	67	71.5	−1.1	97	5	45	13	37	2.78	−2.11	0.91	0	9	15	8	8	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	.....	....	.....	.....	.....	.....	....	2.18	−2.17	1.66	0	5	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	72.2	....	96	5†	46	13	35	3.42	....	2.02	0	7	15	9	7	e.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	70.2	....	93	5	43	13	35	3.29	−1.64	2.40	......	5	21	5	5	ne.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	.....	....	.....	.....	.....	.....	....	2.91	....	1.94	......	3	22	8	1	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	72.8	−0.2	95	9	53	12	28	3.30	−1.45	2.54	0	7	11	15	5	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	5	.....	....	.....	.....	.....	.....	....	3.31	....	2.48	0	7	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	70.0	−2.7	93	10	40	13	42	2.58	−2.96	1.55	0	4	23	0	8	s.	John H. Brown.
Philadelphia, Pa	......	117	59	75.7	+0.9	98	5	57	23	23	1.51	−3.11	0.81	0	8	9	16	6	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	71.5	−1.4	101	5	37	13	44	3.07	−2.00	2.56	0	5	17	8	6	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	71.0^{c}	−0.8	94^{c}	5	54	12†	26^{c}	2.92	−2.14	1.70	0	5	23	5	3	ne.	Information Bureau.
Atlantic City	Atlantic	16	57	72.2	−0.3	92	10	56	13	22	2.55	−1.94	2.06	0	5	14	11	6	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	72.0	−1.4	92	9	53	13	23	1.92	−2.34	1.32	0	6	12	13	6	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	70.2	−0.8	97	3	49	12	26	1.97	−4.16	1.24	0	6	14	11	6	s.	William D. Martin.
Sandy Hook	Monmouth	22	32	72.6	−0.2	94	5	57	23	20	2.94	−2.04	2.08	0	5	14	10	7	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	71.6	−0.7	97	3	49	12	26	2.46	−2.52	2.08	0	5	15	10	6	s.	
For the State	......	......	....	71.1	−0.7	101	3†	34	13	47	3.32	−1.61	2.97	0	6	16	9	6	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for August, 1930

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware															1.20	.04	T.	.01					2.12						T.			3.37
Charlotteburg	Passaic															.86	.02		.85		.01	.03		2.10	.05								3.92
Culvers Lake	Delaware														T.	.60	.17		.51		T.			1.82	.01								3.11
Dover	Passaic															.91		.09			.03			2.10			.01						3.14
Layton	Delaware														T.	.58	.34		.92		T.			2.18							.11		4.13
Long Valley																.93		.03						2.11									3.07
Newton	Delaware									T.						.72	.09		.42		.25			2.34				.03					3.85
Phillipsburg	...do														.05	.62	.04	.02	T.		T.		T.	1.31									2.04
ussex	Hudson															.63	.07		.50		.51			2.61						.03	.14		4.49
The Red Sandstone Plain.																																	
Bayonne	Coast										T.					.70	T.	.25			.15			2.10									3.20
Boonton ‖	Passaic															.84	.07		.06					.45	1.35	.04							2.81
Chatham ‖	...do									.02						.31	.52	.04	.11			.12		.39	2.70	.19							4.40
Elizabeth	Coast									.05	.14					.55	T.	.15	.04					2.06	.01								3.00
Flemington	Raritan									T.						.33	.04	T.	.04		.13			1.96									2.50
ersey City	Coast								T.	.01	.07					.60	T.	.01	.04		T.	T		2.50	.07								3.30
ambertville	Delaware						T.			.04						.29	.13	.04			.25			2.23				.15					3.13
Little Falls ‖	Passaic															1.89	.20		.07		.26	.24		1.05	1.58	.14				T.			5.43
New Brunswick	Raritan									T	T.					.44	T.	.01	.17					2.26	T.								2.88
New Milford.**	Hackensack														.95	.44	.06	.56					.61	2.02	.11								4.75
aterson	Passaic														T	1.41	.17		.11		.02			2.97	.20								4.88
lainfield	Raritan				T.				T.						T.	.65		.05			T.			1.94	.06								2.70
Ridgefield**	Hackensack					T.				.02						.79	.69	.11	.03		T.		T.	2.76	T.								4.40
omerville	Raritan															.50	.01	.04						1.92				.44					2.91
outh Orange	Rahway															.89		.04	.03					2.40		.12							3.48
Verona**	Passaic																																3.45
Woodcliff Lake**	Hackensack								.03						.93	.57	.28	1.48			.04		.40	1.64	.18					.03			5.58
New York, N. Y***	Coast				T.				.01	.01	.09				.04	.52	T.	.04	T.		T.	T.	.02	2.64	.06								3.43
The Southern Interior.																																	
elleplain	Tuckahoe	.93														.40	.03	.58	.02				1.13										3.09
ridgeton	Coast	.29														.88	.08	.12			.08			.86									2.31
urlington	Delaware									T.						.58	.18	.05						2.04		.12			1.20				4.17
layton	Delaware																																
ightstown	Raritan						T.									.71	.10	T.						2.56				T.					3.37
ndian Mills	Mullica									.03	.08					.91	.09							1.92				.70					3.73
akewood	Metedeconk						T.				T					.75	.10	T.						1.70									2.55
Moorestown‖	Delaware									.01						.63	.13	.03	.01					.88	.06	.12			.91	T			2.78
orthfield	Coast	.12														.18	.02	.20						1.66									2.18
emberton										T.						.99	.07	.01						2.02	.23	.02			.08				3.42
leasantville‖	Coast	.43														.21	.07		.18					2.40									3.29
unyon	Coast															.92	.05							1.94									2.91
renton***	Delaware						T.			T.					.04	.47	.07	.04					.08	2.46	T.			.14					3.30
renton No. 2‖	Delaware							T.		T.						.44	.22	.01	.05					1.77	.71	T.			.11				3.31
uckerton	Coast	.03														.95		.05						1.55									2.58
hila., Pa***	Delaware						T.								.01	.54	.01	.02			.01		.16	.65	T.			.11					1.51
The Sea Coast.																																	
sbury Park	Coast						T.			.20	.02				.01	.99								1.70			T.						2.92
tlantic City***	...do	.15														.14	T.	.20					.58	1.48									2.55
ape May City	...do	.01							T.							.43	.13	.03	T.				.20	1.12									1.92
ong Branch**	...do						T.			.22	.12					.37	T.	.02				T.	.30	.94									1.97
andy Hook***	...do				T					.08					T	.72	T.	.06	T.			T.	.02	2.06	T.								2.94

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-
ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	29.99	30.33	13	29.68	23	12.4	48	n.	23	80	70	77	71
ong Branch	30.00	30.33	13	29.61	23					78	63	62	
oorestown										78	52	73	
ew York, N. Y	30.00	30.34	13	29.60	23	10.4	48	n.	23	76	60	65	66
hiladelphia, Pa	30.01	30.35	13	29.71	10	10.3	35	ne.	23	71	46	55	64
idgefield	30.00	30.35	13	29.61	23								
andy Hook	29.98	30.31	13	29.59	23	10.7	56	ne.	23	77	60	73	61
renton	30.00	30.33	13	29.69	10	7.6	44	ne.	28	75	49	62	65
erona													

Daily Temperatures for August, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	90	92	99	99	99	97	95	96	97	88	79	74	82	72	73	84	80	83	82	81	75	76	72	80	84	86	86	....	89	87	88	85.5a
	Minimum	53	60	60	65	73	65	60	65	72	63	48	43	40	50	60	60	55	60	51	55	58	49	55	50	52	56	56	....	57	63	59	57.1a
Charlotteburg	Maximum	86	86	96	95	94	93	91	94	94	92	83	72	80	78	70	80	81	80	80	78	72	74	73	77	81	83	83	86	85	86	87	83.5
	Minimum	45	52	63	65	73	57	54	69	60	66	42	45	36	42	58	55	53	59	58	50	55	47	52	47	48	47	49	52	52	62	54	53.8
Dover	Maximum	85	88	95	94	97	94	89	89	95	86	77	75	80	71	66	80	78	81	79	74	72	74	64	75	80	80	83	85	85	85	85	82.0
	Minimum	50	54	67	68	70	63	60	69	62	63	47	46	41	46	60	62	54	59	53	57	56	48	54	48	51	54	54	56	58	63	58	56.5
Layton	Maximum	88	92	101	101	95	93	94	....	....	84	72	74	81	71	73	83	81	80	82	77	74	76	67	78	82	84	84	86	88	87	87	83.3b
	Minimum	45	52	62	72	68	58	52	....	....	57	42	38	34	44	60	59	51	56	47	52	55	46	54	48	49	53	54	55	54	59	56	52.8b
Long Valley	Maximum	83	88	93	95	95	91	87	94	94	83	76	73	79	71	69	81	79	80	89	78	78	75	67	77	81	81	84	85	85	86	84	82.3
	Minimum	48	53	62	65	77	60	57	60	70	58	42	44	40	45	59	61	51	60	55	52	52	45	54	46	50	51	52	52	54	61	56	54.6
Newton	Maximum	86	89	99	96	99	94	92	96	96	86	77	74	78	71	68	82	81	81	81	79	76	77	68	77	81	83	83	86	87	87	87	83.8
	Minimum	50	65	67	67	73	66	60	62	69	67	51	45	41	49	58	59	56	58	51	55	53	49	53	48	58	55	56	56	60	62	59	57.2
Phillipsburg	Maximum	87	90	97	98	98	95	92	97	98	89	77	75	82	72	72	84	77	83	83	80	76	77	66	77	81	85	85	88	92	87	87	84.7
	Minimum	55	60	64	66	72	66	61	66	72	62	50	45	43	51	61	61	57	62	54	55	60	50	56	51	52	55	57	59	60	65	60	58.3
Sussex	Maximum	88	92	99	97	95	93	93	97	95	83	80	73	81	74	70	82	81	80	80	78	74	77	71	77	83	83	84	87	88	87	87	84.2
	Minimum	45	55	64	67	70	59	54	62	66	58	42	41	35	44	60	59	52	60	47	56	57	44	54	50	47	51	54	52	58	59	58	54.2
The Red Sandstone Plain.																																	
Bayonne	Maximum	80	86	90	92	94	92	87	84	87	84	81	73	75	74	73	70	77	80	79	77	73	75	73	73	79	84	82	85	85	84	78	80.8
	Minimum	64	66	70	71	80	74	72	71	72	71	64	59	57	60	60	61	63	64	62	64	64	64	59	60	64	68	65	67	66	62	60	65.3
Boonton§§	Maximum	84	86	92	92	94	93	89	91	95	84	75	72	80	74	67	82	78	81	82	76	75	77	62	77	82	85	86	86	85	87	88	82.5
	Minimum	49	54	60	70	71	62	58	66	70	61	46	44	41	45	54	61	53	56	54	55	57	52	55	48	52	51	52	54	55	62	57	55.6
Elizabeth	Maximum	84	89	97	95	98	96	88	91	96	88	80	74	79	77	72	79	79	84	81	76	74	76	72	79	84	89	87	90	89	90	89	84.6
	Minimum	56	60	67	69	75	68	66	70	73	69	53	47	46	51	62	62	57	62	54	59	61	57	55	51	58	56	58	59	60	62	62	60.2
Flemington	Maximum	88	89	96	96	100	98	92	99	99	92	79	77	84	77	71	87	73	83	80	79	74	75	71	83	86	84	88	90	91	91	89	85.8
	Minimum	54	58	64	64	75	66	67	67	71	63	50	43	43	48	61	63	56	62	55	54	58	53	54	48	53	56	57	56	58	65	60	58.1
Jersey City	Maximum	83	90	94	93	96	94	89	90	90	88	78	74	74	74	68	79	79	81	80	77	74	76	66	74	81	84	85	87	87	86	87	82.5
	Minimum	64	68	70	71	78	74	73	71	71	69	62	57	56	61	63	62	65	64	61	64	62	64	55	58	62	65	66	67	67	70	69	65.5
Lambertville	Maximum	85	89	95	94	94	90	92	95	94	87	77	74	81	75	69	81	77	81	78	81	73	73	64	79	84	83	85	86	88	87	86	83.1
	Minimum	55	63	65	67	76	66	66	67	71	66	52	47	45	52	61	64	58	63	55	56	57	53	54	50	57	58	59	59	60	66	64	59.7
Little Falls§§	Maximum	87	90	96	96	98	96	90	94	99	87	79	75	76	76	76	84	82	84	84	77	73	76	68	80	85	87	88	89	90	90	90	85.2
	Minimum	52	57	72	71	75	65	60	70	70	62	49	45	43	47	58	61	54	61	52	56	57	49	56	50	55	54	55	57	59	64	60	57.9
New Brunswick	Maximum	84	88	95	95	96	96	90	91	96	93	84	75	78	78	72	78	80	80	80	78	73	75	74	78	82	82	85	86	87	89	88	84.1
	Minimum	55	61	66	67	68	69	67	68	71	70	52	49	44	50	62	59	57	63	53	58	59	53	54	53	57	56	57	57	61	65	62	59.5
Paterson	Maximum	81	87	95	93	94	93	89	89	94	93	78	77	77	80	78	77	80	77	75	73	73	75	61	72	78	80	81	84	85	85	85	81.9
	Minimum	58	61	70	71	76	70	67	70	....	69	52	51	52	60	61	59	62	57	61	60	59	51	56	53	59	58	60	61	62	67	65	61.3a
Plainfield	Maximum	83	91	95	95	97	95	90	92	95	88	79	74	73	72	66	80	79	82	80	77	74	77	67	74	81	83	85	87	87	88	87	83.0
	Minimum	54	64	68	66	74	65	62	67	68	65	49	44	46	47	52	60	60	61	57	58	59	60	50	55	55	50	55	56	57	64	66	58.5
Ridgefield	Maximum	84	88	96	95	97	94	87	88	92	89	81	77	77	77	66	80	78	81	80	73	72	75	60	78	82	83	87	87	86	88	86	82.7
	Minimum	55	62	68	69	76	66	63	69	70	63	55	49	46	51	61	61	57	61	54	59	57	53	55	54	60	57	57	60	62	65	62	59.9
Somerville	Maximum	85	89	97	95	97	95	92	97	99	91	82	79	81	79	69	84	81	83	82	81	77	78	....	82	85	85	86	90	90	89	90	86.3a
	Minimum	52	57	62	65	68	64	60	65	70	60	45	44	44	45	62	62	55	59	52	53	59	48	....	48	55	54	55	57	57	57	60	56.5a
South Orange	Maximum	81	86	94	94	96	96	94	89	94	93	84	72	75	74	73	74	74	83	82	79	70	75	75	74	82	84	83	80	87	....	....	82.7b
	Minimum	52	57	65	65	72	64	62	69	72	68	48	46	46	48	61	61	54	61	54	56	56	53	62	59	55	54	56	57	59	....	....	58.3b
Verona	Maximum	81	84	91	89	91	89	84	85	92	88	74	70	77	73	67	78	77	78	76	73	71	72	66	73	79	80	81	82	83	83	83	79.7
	Minimum	55	63	70	70	76	68	65	69	70	71	54	50	47	54	61	61	57	64	55	57	53	62	63	54	56	58	58	62	63	66	62	61.1
New York, N. Y.	Maximum	81	85	91	90	93	90	86	85	86	83	74	71	74	73	68	77	76	79	77	73	72	74	64	72	78	83	83	84	84	84	84	79.8
	Minimum	65	68	71	71	79	75	73	72	71	69	62	58	56	62	63	63	65	64	61	65	62	64	55	59	63	66	66	68	67	70	70	65.9
The Southern Interior.																																	
Belleplain	Maximum	83	86	93	92	97	87	95	93	96	93	83	78	81	78	74	83	72	80	81	80	74	73	70	80	84	84	86	86	85	89	85	83.9
	Minimum	59	53	69	70	75	65	58	71	70	67	48	43	37	43	61	59	55	61	50	51	57	49	55	57	49	51	50	55	60	61	57	57.0
Bridgeton	Maximum	85	90	96	97	101	92	98	99	98	95	89	78	84	79	73	84	83	80	82	84	78	72	70	80	85	80	81	88	85	92	88	86.0
	Minimum	61	62	70	71	77	69	66	72	73	73	59	52	50	54	62	63	61	65	57	58	60	54	56	53	55	65	60	57	68	63	65	62.3
Burlington	Maximum	86	89	95	96	97	95	94	95	96	94	89	81	83	83	73	81	81	82	82	81	76	73	72	80	84	85	86	86	88	87	89	85.8
	Minimum	59	59	65	71	76	70	61	67	73	71	58	50	46	50	62	63	60	59	56	56	56	55	56	53	56	55	56	56	61	65	67	60.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Hightstown	Maximum	84	90	96	95	94	93	90	94	95	86	79	74	80	79	70	81	78	80	81	80	74	74	76	80	84	82	86	89	90	88	89	84.2
	Minimum	52	60	66	68	74	63	60	65	72	70	47	42	40	46	60	60	55	56	51	53	59	49	50	49	55	53	52	55	63	64	57	57.0
Indian Mills	Maximum	86	92	97	97	97	90	93	97	97	89	80	75	82	77	74	83	76	79	80	78	73	72	67	81	84	84	85	88	89	87	88	84.4
	Minimum	60	57	65	69	78	66	60	67	73	70	51	45	41	50	62	61	55	63	53	53	60	52	55	50	52	53	57	55	60	60	60	58.5
Lakewood	Maximum	82	89	95	94	95	90	88	88	93	87	82	75	76	79	75	80	74	78	77	76	73	72	69	78	78	80	81	82	85	85	84	81.9
	Minimum	57	57	65	66	70	64	61	68	62	69	52	46	45	47	62	62	59	64	54	53	60	52	56	49	55	53	54	59	59	63	59	58.1
Moorestown	Maximum	84	89	95	95	97	90	96	95	95	90	80	75	82	76	67	83	74	81	81	80	75	73	68	80	82	84	86	85	87	87	87	83.8
	Minimum	60	61	66	69	70	67	62	67	73	62	51	47	45	52	61	62	58	58	54	57	57	53	55	52	56	56	57	58	63	64	62	59.2
Pemberton	Maximum	85	88	95	95	96	96	92	93	94	94	89	77	81	80	75	78	81	81	81	80	75	75	74	78	82	83	84	84	87	85	86	84.6
	Minimum	61	60	65	69	78	67	61	68	73	70	54	48	46	51	62	62	58	64	54	56	61	53	55	51	56	54	57	60	60	63	61	59.9
Pleasantville§§	Maximum	78	83	87	85	93	88	89	85	90	90	80	76	78	77	70	84	74	80	78	77	77	71	70	77	79	78	83	81	83	85	82	80.9
	Minimum	60	57	68	70	73	68	61	73	74	73	53	47	43	47	63	59	56	64	53	52	62	51	56	52	55	57	55	60	62	62	59	59.5
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Trenton	Maximum	83	88	94	93	94	91	89	94	95	86	76	73	80	75	69	82	73	80	80	78	72	72	64	80	84	84	84	86	87	87	87	82.6
	Minimum	64	65	69	70	78	72	70	68	72	69	58	53	54	56	62	64	62	64	59	60	60	57	54	56	56	61	62	62	64	67	66	63.0
Tuckerton	Maximum	80	85	90	88	85	90	88	86	88	93	84	82	82	78	72	80	75	80	80	79	72	72	72	76	79	80	85	84	80	83	85	81.7
	Minimum	58	55	65	70	70	70	66	70	70	70	56	43	40	53	55	60	57	60	50	55	60	50	55	55	55	54	55	53	60	58	60	58.3
Philadelphia, Pa.	Maximum	84	88	94	94	98	89	95	96	97	89	78	75	81	75	70	84	75	81	81	82	77	74	68	79	84	86	86	86	88	90	89	84.3
	Minimum	69	69	71	72	80	78	75	75	75	72	66	59	59	62	62	66	66	66	62	65	62	61	57	60	65	65	66	65	67	71	71	67.1
The Sea Coast.																																	
Asbury Park	Maximum	80	84	90	82	94	92	82	82	80	88	78	74	72	74	....	....	....	....	....	74	72	73	68	74	76	76	84	80	78	82	80	79.6
	Minimum	60	68	68	68	68	68	60	68	70	68	60	54	54	60	58	62	64	62	60	60	64	58	56	56	60	54	64	64	64	66	66	62.3
Atlantic City	Maximum	79	79	80	79	86	89	86	78	84	92	78	77	76	74	72	83	73	78	75	76	69	68	69	76	76	77	81	79	77	79	78	78.2
	Minimum	65	69	72	70	72	70	70	71	71	70	63	57	56	67	64	67	66	66	61	66	66	60	57	64	64	64	64	68	70	69	69	66.1
Cape May City	Maximum	80	80	79	80	91	88	86	84	92	90	80	77	75	74	72	81	78	78	79	78	75	70	70	76	76	78	80	78	78	84	80	79.6
	Minimum	64	66	70	70	75	72	70	71	71	68	61	54	53	62	65	64	68	62	57	61	62	55	58	63	60	61	60	66	67	68	68	64.3
Long Branch	Maximum	80	86	97	93	93	91	76	84	81	85	77	73	70	74	67	73	71	72	73	72	69	70	67	74	75	76	77	81	85	84	81	78.3
	Minimum	63	66	71	70	72	68	66	69	71	68	56	49	51	53	62	61	59	61	58	56	61	61	66	52	69	59	59	59	64	65	62	62.2
Sandy Hook	Maximum	78	87	92	91	94	91	78	85	83	85	77	73	72	75	69	74	73	76	76	75	70	72	66	71	76	79	82	82	81	84	81	79.0
	Minimum	68	67	72	71	77	74	72	71	71	71	65	59	61	63	63	65	64	65	64	66	62	63	57	59	63	64	65	64	67	70	69	66.2

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.192	.256	.288	.320	.240	.240	.208	.256	.288	.352	.304	.304	.288	.130	.038	.192	.020	.128	.160	.224	.192	*	.032	.192	.160	.192	.192	.176	.192	.224	.144	6.12
	Wind movement	23	59	61	76	38	26	47	45	42	59	40	44	47	59	20	31	12	34	46	85	81	89	85	45	32	28	33	32	39	30	42	142
Runyon	Evaporation	.200	.240	.240	.230	.250	.240	.210	.180	.210	.190	.190	.160	.180	.120	.000	.050	.080	.120	.150	.120	.160	.160	.140	.080	.150	.165	.120	.180	.150	.180	.165	5.01
	Wind movement	20	37	65	66	39	14	28	27	29	22	26	30	11	16	19	17	12	13	13	24	61	45	46	25	25	12	13	19	22	11	22	82

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followi record.

**Observations taken in the morning, and entered on preceding day.

† Pan frozen.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. SEPTEMBER, 1930. No. 9

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month was the third warmest September during a period of forty-seven years, tieing with that of 1895 for third place. On only a few days was the temperature below normal. The two warm periods from the 14th to 17th, inclusive, and from the 21st to 26th, inclusive, were mainly responsible for giving the month its high average departure in temperature. As a rule, however, the highest points for the month were reached by the mercury on the 2d, 3d and 16th and were mostly in the high eighties and low nineties. The lowest were recorded on the last two to three days of the month and were in the thirties and forties, except along the seacoast where they were mostly in the fifties. Frost occurred at a few stations in the northern districts during this cool period, but no damage was reported.

The average precipitation for the State is the least since 1915, and amounted to about 60 percent of the normal. Nearly all of the rain fell during the first half of the month; the latter half, except for the 25th, being mostly clear and dry. During the growing season now ended (April to September, inclusive) New Jersey has, in common with other sections, experienced a deficiency in precipitation. However, it has not been so marked in this State. April, May and June had 84% of the normal precipitation, while July, August and September had 72%, an average for the six months period of about four-fifths of the normal.

A few reports of damage by lightning and wind were received, but none of loss by hail.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 36 stations, was 69.4°, which was 4.1° above normal. The highest temperature was 95° at Flemington on the 2d, and the lowest, 32°, at Charlotteburg on the 29th. The greatest daily range of temperature was 46° at Belleplain on the 28th. The highest monthly mean temperature was 72.9° at Bayonne, and the lowest, 65.0° at Dover.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +1.9°; Red Sandstone Plain, +1.9°; Southern Interior, +1.8°; Sea Coast, +2.3°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 2.14 inches, which was 1.44 inches below normal. The greatest monthly precipitation was 4.96 inches, at Plainfield, and the least, 0.44 inch at Northfield. The greatest amount of precipitation in any 24 consecutive hours was 3.72 inches at Plainfield on the 14th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or the normal number.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands, —7.85 inches; Red Sandstone Plain, —8.40 inches; Southern Interior, —7.92 inches; Sea Coast, —9.57 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 8 miles per hour, which was 3 miles less than normal. The highest velocity, sustained for 5 consecutive minutes, was 37 miles per hour from the west at Trenton on the 16th.

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MISCELLANEOUS.

The per cent of possible sunshine was 66, or 2 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.00 inches, or 0.07 inch below normal. The highest reading was 30.35 inches on the 1st at Trenton and the lowest was 29.62 inches on the 16th at Verona.

The mean stage of the Delaware River at Phillipsburg was 0.8 foot, and the highest stage was 1.7 feet on three days. The mean stage at Trenton was 0.1 foot, which was 1 0 foot below normal. The highest stage was 0.8 foot on the 19th.

Thunderstorms occurred at several stations on the following dates: 2, 3, 5, 6, 7, 8, 13, 14, 15, 16, 17, 22, 24, 25 and 26. Dense fog was noted at various stations on the following dates: 1, 12, 14, 15, 16, 20, 21, 25 and 26. Light frost occurred on the 29th at Paterson, Charlotteburg, Plainfield and Layton, and on the 30th at Charlotteburg. Layton reported heavy frost on the 30th. Moderate hail fell on the 2d at Layton. Auroras were observed at Layton on the 19th, 26th and 30th.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	64.2	93	38	0.83	1.69	0.25	......	......	......	......
1886	66.9	95	36	1.13	1.76	0.86	......	......	......	......
1887	61.6	90	30	3.66	6.25	1.62	......	......	......	7
1888	63.1	*84*	29	7.09	10.65	**3.75**	......	......	14	12
1889	64.8	90	34	**8.36**	**13.13**	3.17	......	......	14	14
1890	64.4	91	33	4.75	8.61	2.59	10	10	10	10
1891	68.7	95	**39**	2.46	5.91	0.90	16	9	5	6
1892	64.2	90	33	1.81	3.78	1.02	15	11	4	6
1893	62.7	90	31	3.20	5.38	1.93	12	10	8	8
1894	68.8	97	31	7.46	11.65	3.69	10	10	10	8
1895	69.7	**109**	29	1.07	2.71	0.22	17	10	3	5
1896	65.1	95	30	4.37	8.74	2.26	19	7	4	5
1897	65.5	99	30	1.65	3.97	0.21	19	7	4	5
1898	68.6	100	31	2.00	3.87	0.65	17	8	5	6
1899	64.4	93	30	5.88	9.61	2.88	15	9	6	9
1900	69.9	98	32	2.86	7.37	1.09	14	10	6	6
1901	66.8	94	29	3.38	6.82	1.63	15	9	6	10
1902	64.6	93	30	5.65	8.95	3.11	11	7	12	13
1903	65.0	92	29	3.34	7.10	1.39	17	8	5	7
1904	64.8	93	*23*	4.79	10.08	0.89	14	10	6	7
1905	65.4	90	28	5.23	9.18	2.87	16	7	7	8
1906	68.9	94	33	2.19	4.66	0.75	15	9	6	7
1907	67.1	92	31	8.08	12.95	3.55	10	8	12	14
1908	65.7	90	29	2.09	4.13	0.95	11	10	9	3
1909	64.5	89	30	3.30	4.58	2.08	11	10	9	8
1910	67.3	97	32	2.39	3.97	1.01	12	10	8	6
1911	66.4	90	30	2.88	5.33	1.08	10	12	8	9
1912	65.9	87	28	4.47	6.76	2.68	12	7	11	10
1913	64.4	96	27	3.87	6.55	1.56	13	8	9	9
1914	64.0	99	24	*0.37*	*1.64*	*0.14*	21	6	3	3
1915	68.5	97	30	2.08	4.46	0.55	17	9	4	5
1916	65.2	98	31	2.84	5.29	1.29	20	7	3	6
1917	*61.5*	87	27	2.74	6.13	0.47	16	7	7	6
1918	62.2	90	29	3.84	6.00	2.66	14	8	8	9
1919	65.8	96	32	3.26	6.28	1.04	16	6	8	8
1920	66.8	90	30	3.87	8.53	1.67	17	8	5	7
1921	**70.2**	99	36	2.35	5.04	0.80	15	8	7	8
1922	66.7	95	27	2.26	5.22	0.59	19	5	6	4
1923	67.0	90	28	3.78	6.26	2.24	14	8	8	7
1924	62.2	99	29	5.42	8.44	2.47	13	8	9	10
1925	67.8	96	25	2.92	5.81	0.64	11	11	8	7
1926	64.5	93	32	4.18	7.09	1.53	14	6	10	10
1927	65.6	97	29	2.66	5.03	0.65	19	6	5	5
1928	62.6	90	29	4.52	9.62	1.54	12	8	10	10
1929	67.0	100	28	4.74	8.24	2.12	14	7	9	9
1930	69.4	95	32	2.14	4.96	0.44	16	9	5	8

W. B. O.Philadelphia-10-27-30-1050.

Climatological Data for September, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch ormore	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	68.8^{a}	+4.1	91^{a}	16	37^{a}	29	38^{a}	1.61	−2.16	0.40	0	7	16	8	6	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	67.0	+5.1	89	2	32	29	42	1.99	−2.43	0.84	0	6	19	5	6	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	......	......	......	41	29†	....	2.91	−1.63	0.95	0	10	20	6	4	e.	Brice E. Riker.
Dover	Morris	600	46	65.0^{a}	+2.8	87^{a}	2†	37^{a}	29	36^{a}	2.93	−1.16	1.38	0	7	9	14	7	......	William C. Harris
Layton	Sussex	480	29	65.4	+3.1	89	16	35	30	37	4.36	+0.44	1.26	0	11	13	7	10	sw.	A. M. Depue.
Long Valley	Morris	520	....	65.9	......	88	2	33	29	39	1.81	......	0.61	0	7	21	8	1	s.	S. N .Dilts.
Newton	Sussex	769	46	67.4	+3.9	89	2†	39	30	35	1.18	−2.63	0.60	0	5	16	6	8	sw.	Irving J. Kern.
Phillipsburg	Warren	363	47	68.7	+3.5	90	16	39	29	35	2.00	−1.66	0.63	0	8	17	8	5	......	Town Engineer.
Sussex	Sussex	442	35	66.1	+1.9	89	16	34	30	40	2.99	−0.91	0.61	0	10	16	8	6	w.	A. J. W. Mowatt
Means and extremes	......	......	....	66.6	+3.5	91	16	32	29	42	2.42	−1.52	1.38	0	8	16	8	6	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	72.9	+6.5	88	16	53	30	19	2.52	−1.01	1.52	0	8	23	2	5	w.	William Mann.
Boonton	Morris	400	§40	66.0	......	88	26	38	29	37	2.82	−1.31	1.37	......	9	11	3	16	sw.	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	....	3.85	−0.44	2.17	0	12	22	4	4	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	71.2	+4.5	94	2†	43	30	37	4.14	+0.37	2.43	0	9	21	3	6	sw.	Union County Park Com.
Flemington	Hunterdon	140	§44	70.6	+4.3	95	2	40	29	38	1.31	−2.59	0.36	0	9	21	6	3	nw.	Hiram E. Deats.
Jersey City	Hudson	10	32	71.5	+4.3	90	16	51	30	22	1.77	−1.58	0.75	0	8	8	14	8	s.	S. K. Pearson.
Lambertville	Hunterdon	430	43	68.9	......	90	16	45	28†	32	1.05	−2.84	0.35	0	8	21	4	5	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	69.2	+5.1	92	16	39	29	36	2.78	−0.80	1.15	0	11	18	5	7	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	70.4	+4.8	92	16	44	29	33	1.43	−2.17	0.49	0	8	13	15	2	s.	N. J. Experiment Station.
New Milford‡‡	Bergen	......	12	......	......	......	......	......	......	....	2.33	......	0.53	......	7	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	68.5	+2.3	86	25	45	29	30	2.40	−1.73	0.42	0	8	9	14	7	sw.	Vincent A. Messineo.
Plainfield	Union	120	42	69.2	+3.6	90	16	40	29	36	4.96	+0.59	3.72	0	8	8	18	4	s.	S. K. Pearson.
Ridgefield	Bergen	80	13	69.4	......	91	16	44	29	31	2.24	......	0.77	0	9	11	15	4	s.	George P. Kirsten.
Somerville, near	Somerset	70	47	69.0	+3.0	94	16	37	29	40	1.28	−2.37	0.57	0	9	20	4	6	sw.	Julius Gerlich.
South Orange	Essex	200	58	......	......	......	......	......	......	....	2.23	−1.58	1.11	0	9	20	6	4	w.	Everett W. Bird.
Verona††	Essex	490	4	67.3	......	86	16	43	30	27	1.62	......	0.43	0	10	9	12	9	s.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	3.19	......	1.15	......	7	....	....	....	......	Hackensack Water Co.
New York, N.Y.	......	365	60	71.2	+4.4	89	16	51	30	20	1.37	−2.02	0.61	0	11	7	15	8	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	69.7	+4.3	95	2	37	29	40	2.52	−1.34	3.72	0	9	16	8	6	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	69.6^{a}	+3.1	92^{a}	16†	34^{a}	28	46^{a}	1.05	−2.34	0.33	0	6	8	12	10	w.	A. F. Waldron.
Bridgeton	Cumberland	30	47	72.4	+4.2	92	16	47	28	34	2.08	−1.23	0.81	0	6	27	3	0	sw.	Bennett K. Matlack
Burlington	Burlington	12	§44	71.7	+4.9	92	16	50	5	35	1.87	−1.74	0.45	0	8	12	10	8	sw.	Public Service Power Co.
Clayton	Gloucester	134	30	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Hammonton (near)	Atlantic	80	§24	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown	Mercer	120	36	70.0	+3.2	94	16	40	29	39	1.37	−1.76	0.45	0	5	19	9	2	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	71.0	+4.9	94	2†	40	28	40	1.74	−2.17	1.20	0	7	12	14	4	sw.	James M. Armstrong.
Lakewood	Ocean	54	26	68.8	+4.2	90	16	42	28	34	1.60	−1.19	0.60	0	7	17	6	7	sw	R. W. Holman.
Moorestown	Burlington	......	67	70.0	+4.0	91	2†	46	30	35	2.61	−1.02	0.95	0	7	15	8	7	sw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	23	......	......	......	......	......	......	....	0.44	−2.06	0.21	0	5	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	70.8	......	90	16†	44	28†	35	1.40	......	0.69	0	8	11	15	4	e.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	69.3	......	91	3	38	28	42	0.67	−2.45	0.35	......	8	22	5	3	s.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	......	......	......	......	......	......	....	1.60	......	0.49	......	8	20	10	0	w.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	70.8	+3.9	90	16	49	30	30	1.55	−1.85	0.61	0	12	11	11	8	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	5	......	......	......	......	......	......	....	1.78	......	0.74	0	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	69.6	+3.4	92	25	42	29	35	2.78	−0.28	1.30	0	7	22	1	7	s.	John H. Brown.
Philadelphia, Pa	......	117	59	74.1	+6.1	91	15	55	30	21	2.57	−0.57	1.13	0	9	7	14	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	...	70.4	+4.0	94	2†	34	28	46	1.61	−1.64	1.30	0	7	16	9	5	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	69.6	+2.8	86	17	51	29	27	1.53	−1.46	0.54	0	6	24	5	1	sw.	Information Bureau.
Atlantic City	Atlantic	16	57	72.3	+5.5	92	3	54	30	23	0.89	−1.76	0.35	0	9	7	18	5	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	72.6	+3.6	88	25	50	30	21	2.12	−0.88	1.76	0	5	12	10	8	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	68.6	+2.7	86	3†	46	29	28	1.59	−1.47	0.45	0	9	12	14	4	s.	William D. Martin.
Sandy Hook	Monmouth	22	32	71.2	+4.1	86	16	54	30	18	3.33	−0.10	2.29	0	8	7	17	6	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	70.9	+3.7	92	3	46	29	28	1.89	−1.13	2.29	0	7	12	13	5	s.	
For the State	......	......	....	69.4	+4.1	95	2	32	29	46	2.14	−1.44	4.96	0	8	16	9	5	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for September, 1930

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	T.	.38	.03				T.						.37	.04	.04	T.	.40								.35							1.61
Charlotteburg	Passaic		.25												.84		.02	.22								.12	.54						1.99
Culvers Lake	Delaware		.82					.01	.41					.42	.08	.04	.05	.04								.09	.95						2.91
Dover	Passaic		.13					.14	.04					.22	1.38		.35									.67							2.93
Layton	Delaware	T.	.69					.04	.33					.63	.03	.05	.34	.94				.02				1.26	.03						4.36
Long Valley		.09	.19	.25				T.						.16	.61			.40								.11							1.81
Newton	Delaware	T.	.60	T.										.13			.03	.20								.22							1.18
Phillipsburg	do	.13	.06	.56				.05	.31					.08	T.	.18	.63	T.								T.							2.00
Sussex	Hudson	.03	.61						.30					.20	.36	.14	.07	.44								.24	.60						2.99
The Red Sandstone Plain.																																	
Bayonne	Coast	.05	.05					T.	.40					T.	1.52		.35	.03								.10					.02		2.52
Boonton ‖	Passaic		.10	.12				.16	.03					.03	1.37			.23								.19	.59						2.82
Chatham ‖	do	.02	.09	.17				.03	.22					.06	2.17	.21		.52								.02	.27				.07		3.85
Elizabeth	Coast	.10	.10	.20				T.	.22					.20	2.43			.75								.10	.04						4.14
Flemington	Raritan	.10	.17	.05					.09					.03	.36			.31								T.	.18				.02		1.31
Jersey City	Coast	T.	.05	.04			T.	.02	.75					T.	.69			.14								.07					.01		1.77
Lambertville	Delaware	.22	T.	.04				.11	.10					.16	.05			.35								T.	.02						1.05
Little Falls ‖	Passaic		.12	.42	.01			.07	.02					.02	1.15			.37					.05			.16	.39						2.78
New Brunswick	Raritan	.08	.10	.16					.18					.42	.07			.40								T.	.02						1.43
New Milford.**	Hackensack	.08	.39				.13							.46			.53								.26	.48							2.33
Paterson	Passaic		.42	T.			.06	.05						*	.89	T.		.30							.28	.40							2.40
Plainfield	Raritan		.06	.30				.02	.25					.10	3.72			.42								.09					T.		4.96
Ridgefield**	Hackensack	.01	.35					.06	T.					.02	.60		.75	.02				.01				.42							2.24
Somerville	Raritan	.10	.06	.12					.14						.08		.50	.07								.20					.01		1.28
South Orange	Rahway	.02	.12	.06					.15					.15	1.11			.56								.04	.02						2.23
Verona**	Passaic	.06	.06				.26	.02	.03					.34	.43	T.	.22	.08				T.				.12							1.62
Woodcliff Lake**	Hackensack	.06	.65				.15							.71			.33								.14	1.15							3.19
New York, N. Y***	Coast	.03	.02	.04			T.	.05	.41				T.	.01	.60		.11	.01								.08					.01		1.37
The Southern Interior.																																	
Belleplain	Tuckahoe		.32				T.	*	.33				T.	.06	.05			.29								T.							1.05
Bridgeton	Coast	.34							.19					.60	.81			.11								.03							2.08
Burlington	Delaware		.13	.40					.17						.27			.45					.11			.20	.14						1.87
Clayton	Delaware																																......
Hammonton	Mullica																																......
Hightstown	Raritan			T.					.30					.20	.18			.45								T.	.24						1.37
Indian Mills	Mullica		.07	.06					.14					.06	1.20			.09								.12							1.74
Lakewood	Metedeconk			.28					.15					T.	.65			.20					.20			.05	.07						1.60
Moorestown ‖	Delaware		.10	.12					.18	T.				T.	.84	T.		.95								.30	.12						2.61
Northfield	Coast		.07				.03	.21										.12								.01							0.44
Pemberton			.03	.07					.14					.01	.69			.12								.31	.03						1.40
Pleasantville ‖	Coast		.03	T.	T.		.13		.35					.02	.03				.05	.03						.03							0.67
Runyon	Coast	.03	.08	.06					.22					.49	.06			.27									.39						1.60
Trenton***	Delaware	.04	.57				.02	.11	.03				.01	.09	.04		.58	.01					.04			.01							1.55
Trenton No. 2 ‖	Delaware	T.	.04	.54			.02	.02	.15	T.				.02	.18			.74					.05				.02						1.78
Tuckerton	Coast						1.30	.05	.15					.03	1.12			.08								.05							2.78
Phila., Pa***	Delaware	.12	.39	T.			T.	.14	.05				T	.78	.35		.06	.02				T.			T.	.66				T.			2.57
The Sea Coast.																																	
Asbury Park	Coast	T.	.24	T.				T.	.20						.05		.03	T.					.47			.54							1.53
Atlantic City***	do	.01	T.		.01	.34	.08	.03				T.	.01	.20			.20									.01							0.89
Cape May City	do			.21	T.		.12	T.	1.76				T.	02	T.			T								.01							2.12
Long Branch**	do	.01	T.	.09				.06	.23					.01	.44		T.	.36					.30			.09							1.59
Sandy Hook***	do	.06	.01	T			T.	.06	.25					.05	2.24		T.	.08					T.			.58					T.		3.33

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.00	30.32	1	29.68	27	11.3	36	sw.	16	80	67	77	64
Long Branch	30.00	30.31	1	29.67	27	......	......	......	......	71	61	69	......
Moorestown	......	......	......	......	......	......	......	......	......	81	54	79	......
New York, N. Y	30.00	30.33	1	29.67	27	10.4	43	nw.	16	77	56	66	71
Philadelphia, Pa	30.01	30.32	1	29.68	27	9.2	39	w.	2	74	52	61	71
Ridgefield	30.00	30.33	1	29.66	27	......	......	......	......	......	......	......	......
Sandy Hook	29 98	30.34	1	29.64	27	10.0	32	w.	16	78	60	73	62
Trenton	30.00	30.35	1	29.65	27	7.1	37	w.	16	76	50	66	72
Verona	30.00	30.28	24	29.62	16	4.5	24	n.	2	80	51	76	......

Daily Temperatures for September, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	81	89	86	82	79	86	85	79	78	79	85	83	77	79	87	91	85	79	79	85	86	85	85	82	....	89	79	78	72	67	....	82.0
	Minimum	68	70	64	49	47	57	61	60	44	47	51	57	67	67	64	66	67	56	51	47	58	57	50	47	....	63	56	43	37	39	....	55.5
Charlotteburg	Maximum	80	89	83	78	75	84	83	82	80	82	80	82	81	80	87	88	87	79	80	80	82	81	79	79	84	87	85	72	70	66	....	80.8
	Minimum	67	68	66	47	38	50	57	46	60	59	60	55	57	60	60	65	66	47	43	38	53	48	46	40	59	62	62	46	32	37	....	53.1
Dover	Maximum	78	87	84	76	76	81	78	73	73	71	79	77	76	84	....	87	81	72	74	79	79	80	77	79	82	83	72	71	65	64	....	77.2
	Minimum	60	70	58	50	43	55	60	54	42	45	48	54	66	67	....	67	64	52	48	43	46	54	51	45	54	62	51	42	37	41	....	52.7
Layton	Maximum	81	87	82	75	75	84	82	75	75	76	81	80	76	76	84	89	82	73	78	80	82	83	78	79	83	84	72	71	66	63	....	78.4
	Minimum	66	69	62	45	41	51	57	56	39	42	47	53	52	66	60	66	61	58	46	44	55	52	46	42	63	61	56	40	37	35	....	52.3
Long Valley	Maximum	78	88	84	76	74	82	79	74	74	74	81	80	75	77	85	87	85	74	75	81	82	81	78	80	85	86	72	73	66	64	....	78.3
	Minimum	64	69	60	48	41	64	61	60	42	44	47	47	64	66	62	66	64	49	46	42	49	54	51	44	64	64	60	38	33	42	....	53.5
Newton	Maximum	79	89	83	76	76	80	83	78	73	74	80	80	77	80	84	89	82	76	78	83	83	82	82	82	86	86	78	75	70	65	....	79.6
	Minimum	65	66	63	53	46	50	52	48	43	48	60	59	65	68	68	64	65	53	48	48	59	54	56	48	62	62	58	45	43	39	....	55.3
Phillipsburg	Maximum	81	88	84	82	76	86	81	78	77	77	80	81	77	80	88	90	83	75	74	83	85	86	83	82	85	88	72	76	71	66	....	80.5
	Minimum	68	71	65	51	49	59	63	56	48	50	54	58	68	72	66	66	67	53	52	48	60	57	52	48	65	64	53	43	39	43	....	56.9
Sussex	Maximum	81	88	84	78	75	85	81	78	75	76	81	80	79	77	86	89	82	73	79	82	83	83	79	80	84	86	80	72	67	62	....	79.5
	Minimum	66	67	63	46	41	52	57	57	39	44	47	58	52	66	63	66	67	51	46	42	56	50	46	42	63	60	63	41	35	34	....	52.7
The Red Sandstone Plain.																																	
Bayonne	Maximum	77	86	85	82	74	82	79	75	76	78	80	82	80	82	80	88	86	80	78	78	80	82	80	82	86	86	84	74	72	66	....	80.0
	Minimum	72	74	73	64	62	68	63	63	60	62	65	66	70	71	70	72	70	63	66	65	67	65	63	63	68	71	67	62	56	53	....	65.8
Boonton§§	Maximum	80	87	85	75	77	82	81	74	74	76	79	79	79	79	86	78	81	74	77	79	80	82	78	79	85	88	73	72	66	65	....	78.3
	Minimum	62	67	66	48	43	47	59	60	43	45	48	54	64	66	66	67	68	55	47	43	46	55	50	44	48	65	63	41	38	43	....	53.7
Elizabeth	Maximum	80	94	92	81	78	87	87	80	80	78	87	84	83	82	87	94	89	79	76	87	88	88	82	86	90	90	77	80	71	69	....	83.5
	Minimum	68	70	67	55	50	58	65	61	47	52	53	62	67	68	70	68	68	57	53	50	61	61	56	50	66	66	64	50	44	43	....	59.0
Flemington	Maximum	82	95	92	80	78	89	83	78	81	78	84	85	81	84	92	92	87	77	75	84	87	89	86	85	89	90	85	80	77	70	....	83.8
	Minimum	68	70	66	50	48	57	63	63	46	49	52	58	66	68	69	78	57	55	51	47	58	58	54	47	65	65	64	45	40	45	....	57.4
Jersey City	Maximum	77	87	86	77	74	83	80	73	75	74	80	82	80	81	80	90	83	74	79	80	81	83	80	82	86	86	74	74	68	65	....	79.1
	Minimum	70	70	64	62	61	67	67	62	56	59	64	65	68	67	70	70	69	62	63	62	66	66	63	62	68	70	62	57	54	51	....	63.9
Lambertville	Maximum	81	89	86	78	78	86	79	74	76	72	81	81	77	83	89	90	82	72	73	82	83	83	81	81	87	89	70	75	68	66	....	79.7
	Minimum	67	69	61	55	51	62	63	54	49	51	55	61	67	69	70	67	64	56	54	50	60	63	57	52	68	65	48	45	45	45	....	58.1
Little Falls§§	Maximum	82	90	83	80	79	86	84	76	78	78	84	82	80	81	86	92	85	77	80	82	85	85	82	83	88	90	77	76	70	68	....	81.6
	Minimum	66	70	65	59	46	56	61	60	45	48	51	60	65	66	67	67	68	54	51	46	58	58	53	47	58	65	64	44	39	43	....	56.7
New Brunswick	Maximum	84	86	87	80	78	84	80	76	77	77	82	82	81	80	89	92	85	81	76	82	83	86	84	82	88	88	81	78	76	68	....	81.8
	Minimum	68	69	67	54	49	58	65	63	48	51	54	64	66	68	70	67	68	57	54	49	61	61	58	49	66	66	65	45	44	46	....	59.0
Paterson	Maximum	80	85	83	80	75	80	82	75	72	72	80	78	77	80	82	84	81	81	78	80	81	82	78	84	86	82	78	74	62	64	....	78.5
	Minimum	69	70	68	56	54	54	52	61	52	50	55	58	60	64	70	75	62	58	62	59	52	61	56	54	60	57	61	50	45	51	....	58.5
Plainfield	Maximum	78	88	88	77	76	84	81	75	77	74	82	83	81	85	86	90	84	74	82	82	82	84	81	84	88	88	74	74	68	67	....	80.6
	Minimum	67	68	66	51	47	60	60	60	46	49	51	61	64	64	70	68	68	55	51	55	60	59	55	48	65	64	64	50	40	45	....	57.7
Ridgefield	Maximum	80	86	87	79	77	84	80	77	76	75	82	83	78	81	84	91	85	75	77	81	83	84	81	79	87	89	78	75	70	69	....	80.4
	Minimum	68	71	61	55	48	59	62	59	47	50	53	64	67	67	69	69	66	57	52	50	63	61	57	48	66	66	55	50	44	46	....	58.3
Somerville	Maximum	82	90	89	79	81	87	83	76	79	75	84	85	80	81	93	94	87	76	79	84	86	87	84	85	92	91	77	78	72	71	....	82.9
	Minimum	68	70	62	50	44	57	63	45	43	46	49	57	66	69	71	68	64	52	50	46	59	57	53	46	65	64	50	38	37	42	....	55.0
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Verona	Maximum	76	85	83	74	74	80	76	72	70	70	79	78	75	76	80	86	80	71	72	77	79	80	76	78	82	83	73	73	65	64	....	76.2
	Minimum	67	71	58	55	56	60	62	54	47	51	54	63	68	66	69	69	65	57	52	53	63	61	56	51	67	67	56	48	44	43	....	58.4
New York, N. Y	Maximum	76	86	84	76	73	81	79	72	74	73	79	81	79	79	78	89	83	73	77	79	79	82	79	80	85	85	74	73	67	64	....	78.0
	Minimum	70	71	64	62	62	67	68	62	57	60	64	66	68	68	70	70	70	63	63	62	67	67	64	63	69	70	62	57	54	51	....	64.4
The Southern Interior.																																	
Belleplain	Maximum	82	89	90	85	74	85	....	81	78	82	82	84	85	87	88	92	85	72	84	82	82	89	87	85	91	92	76	80	73	70	....	83.2
	Minimum	67	67	65	50	46	66	....	60	44	43	45	60	63	66	66	72	69	55	49	45	62	61	55	46	67	64	58	34	42	37	....	56.0
Bridgeton	Maximum	85	90	90	83	83	88	85	76	80	83	84	83	80	89	86	92	85	75	79	83	85	90	87	85	91	91	76	78	71	71	....	83.5
	Minimum	68	70	69	56	57	64	66	67	52	53	54	64	69	70	69	72	69	60	56	53	58	65	62	55	61	67	70	47	48	50	....	61.4
Burlington	Maximum	88	91	91	89	80	84	86	84	78	80	84	89	82	86	90	92	90	85	72	82	82	87	86	82	88	88	87	73	72	70	....	83.9
	Minimum	66	67	65	52	50	57	62	58	51	54	58	54	50	62	62	67	72	62	53	56	61	64	62	57	67	66	65	60	53	51	....	59.5
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	85	89	84	85	90	91	76	80	71	70	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	64	64	56	49	69	66	62	44	42	46	....	......
Hightstown	Maximum	84	89	87	78	80	86	81	77	78	77	84	86	82	86	90	94	87	78	75	86	86	86	81	84	90	89	80	78	71	68	....	82.6
	Minimum	65	68	64	47	44	62	64	63	44	46	53	65	67	68	70	67	68	54	51	47	64	63	50	45	68	64	62	43	40	46	....	57.4
Indian Mills	Maximum	88	94	88	80	82	89	82	74	80	78	84	88	82	87	90	92	88	75	76	86	88	88	82	87	91	94	81	80	70	69	....	83.8
	Minimum	66	68	67	49	47	64	64	65	45	46	51	62	69	70	70	70	68	55	52	48	62	61	57	48	68	65	63	40	41	47	....	58.3
Lakewood	Maximum	80	85	85	81	75	85	83	73	72	70	79	84	80	80	85	90	82	80	73	78	82	84	80	81	87	85	77	75	67	66	....	79.5
	Minimum	65	68	66	52	44	58	60	65	45	47	53	64	67	70	70	69	69	55	52	47	62	63	56	47	67	66	64	42	44	49	....	58.2
Moorestown	Maximum	86	91	88	78	79	87	81	75	77	76	81	84	80	84	91	91	85	72	74	82	83	87	83	85	87	88	74	78	70	69	....	81.5
	Minimum	68	69	59	52	51	64	66	53	48	50	52	61	68	70	70	69	69	57	53	49	62	63	53	50	68	66	54	47	47	46	....	58.5
Pemberton	Maximum	84	88	88	88	80	79	79	73	76	77	81	85	81	79	89	90	90	79	76	82	82	86	85	84	86	87	79	76	74	68	....	81.7
	Minimum	67	69	67	53	51	61	66	66	50	50	56	64	68	71	69	71	69	56	53	50	63	63	58	49	68	67	65	44	44	51	....	60.0
Pleasantville§§	Maximum	76	84	91	79	77	81	78	77	75	77	79	80	81	84	80	87	76	86	77	81	82	89	85	80	88	88	76	80	73	69	....	80.5
	Minimum	67	68	67	51	50	59	63	67	49	47	49	57	68	69	72	72	68	54	56	47	54	64	58	50	56	66	71	38	42	45	....	58.1
Runyon	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Trenton	Maximum	84	88	87	77	78	84	79	73	76	73	81	83	79	86	88	90	83	72	75	82	83	84	81	82	88	88	72	76	68	66	....	80.2
	Minimum	68	66	64	59	56	63	66	59	54	52	60	64	69	70	70	69	69	61	57	52	64	66	62	56	69	67	58	51	50	49	....	61.8
Tuckerton	Maximum	77	88	90	84	79	80	78	76	77	80	78	77	80	83	82	87	83	78	82	82	82	90	83	81	92	91	83	80	75	75	....	81.8
	Minimum	60	65	70	50	48	65	63	65	47	55	53	47	55	68	70	70	68	55	53	51	56	60	56	50	68	65	55	45	42	45	....	57.8
Philadelphia, Pa	Maximum	88	90	89	81	80	87	83	76	78	78	82	82	80	85	91	89	86	74	75	82	83	88	83	85	87	88	74	78	70	67	....	82.0
	Minimum	71	70	70	64	63	68	68	66	60	61	63	66	70	71	72	74	71	66	63	62	67	71	69	65	70	63	64	57	57	55	....	66.2
The Sea Coast.																																	
Asbury Park	Maximum	76	80	80	80	74	78	78	72	74	72	71	78	76	78	79	85	86	76	78	78	77	85	82	78	82	81	75	79	69	68	....	77.5
	Minimum	66	66	66	58	54	64	62	56	56	56	55	64	66	70	71	70	71	60	57	57	67	67	62	63	62	68	63	52	51	52	....	61.7
Atlantic City	Maximum	74	81	92	78	76	77	74	72	74	75	78	77	78	80	77	81	81	76	74	78	77	88	79	79	85	83	77	74	71	70	....	77.9
	Minimum	72	72	69	62	68	70	70	68	58	61	68	71	72	72	72	75	71	64	63	65	70	69	66	63	72	70	61	57	55	54	....	66.7
Cape May City	Maximum	76	82	86	80	78	82	81	76	75	76	77	79	80	82	82	82	84	84	75	78	79	87	81	79	88	82	76	75	70	69	....	79.4
	Minimum	71	73	70	60	66	71	68	62	56	58	61	70	71	72	72	74	75	64	63	62	70	71	67	61	73	70	62	54	56	50	....	65.8
Long Branch	Maximum	75	85	86	76	72	78	72	72	70	70	76	80	75	78	85	86	83	70	70	76	77	84	83	77	86	82	75	76	70	68	....	77.1
	Minimum	68	68	63	53	50	64	64	64	54	52	60	64	66	66	69	69	66	57	54	50	63	64	57	53	68	67	66	48	46	48	....	60.0
Sandy Hook	Maximum	75	85	85	76	74	78	77	73	70	69	79	82	76	77	78	86	83	73	73	78	79	82	78	76	84	84	73	75	67	66	....	77.0
	Minimum	70	71	70	64	62	68	68	65	60	62	66	67	70	67	71	71	70	65	64	63	67	68	65	62	70	69	63	57	56	54	....	65.5

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.030	.160	.256	.192	.162	.128	.126	.160	.160	.096	.160	.100	.094	.160	.096	.224	.210	.158	.112	.160	.112	.192	.272	.094	.160	.192	.192	.224	.208	.160	....	4.75
	Wind movement	36	28	45	49	55	27	34	39	25	22	45	30	48	27	42	59	22	46	23	20	36	38	29	40	38	29	57	50	34	64	....	113
Runyon	Evaporation	.090	.080	.160	.195	.200	.100	.120	.140	.150	.140	.160	.120	.040	.120	.140	.180	.150	.160	.120	.120	.140	.140	.160	.160	.120	.210	.180	.180	.190	.190	....	4.35
	Wind movement	9	14	26	25	11	15	28	27	15	23	27	45	15	16	34	33	38	21	10	19	21	27	12	23	15	29	30	32	31	8	....	67

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

57.03
(NNJ)

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CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. OCTOBER, 1930. No. 10

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Except for the period from the 10th to 17th, inclusive, October was generally cool. The low temperature of 12 degrees at Belleplain is within one degree of the record low for the State established at Layton on the morning of October 13th in 1906. Outside of this occurrence there were no outstanding temperature characteristics. The highest for the month were observed mostly on the 13th and were registered in the high seventies and low eighties, while the lowest were in the twenties for the most part and occurred on the 20th, 21st and 23d. However, there was a wide range in the low points reached, from the 12 degrees at Belleplain to 38 degrees at Sandy Hook. The first killing frosts of the autumn came, in general, a few days later than the average date.

Deficient precipitation continues, this being the ninth month so far this year with less than the normal amount. June was the exception. During the first thirteen days there was no rain. The 15th to 18th, inclusive, the 24th, and the 28th to 31st, inclusive, were the rain periods, about two-thirds of the month's total falling during the first-named period. The average for the State amounted to less than 60 percent of the normal. Streams and wells are exceptionally low as a result of the long continued dryness. The first snow of the season occurred at Culvers Lake on the 21st, and this was followed on the 25th by snow at five other stations. All of the amounts were too small to measure.

No damaging wind or hail storms were reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 52.6°, which was 2.3° below normal. The highest temperature was 89° at Flemington on the 13th, and the lowest, 12° at Belleplain on the 23d. The greatest daily range of temperature was 49° at Runyon on the 13th. The highest monthly mean temperature was 56.8° at Bayonne, and the lowest, 48.7° at Runyon.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +1.5°; Red Sandstone Plain, +1.5°; Southern Interior, +1.3°; Sea Coast, +1.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 47 stations, was 1.95 inches, which was 1.45 inches below normal. The average total snowfall was a trace. The greatest monthly precipitation was 3.70 inches, at Hammonton, and the least, 0.93 inch at Boonton. The greatest amount of precipitation in any 24 consecutive hours was 2.90 inches at Hammonton on the 14-15th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 6, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands, —9.76 inches; Red Sandstone Plain, —10.81 inches; Southern Interior, —8.93 inches; Sea Coast, —10.97 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 10 miles per hour, which was 1 mile less than normal. The highest velocity, sustained for 5 consecutive minutes, was 50 miles per hour from the northwest at Atlantic City on the 25th.

MISCELLANEOUS.

The per cent of possible sunshine was 65, or 2 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.06 inches, or 0.01 inch below normal. The highest reading was 30.44 inches on the 22d at Trenton and the lowest was 29.55 inches on the 25th at Ridgefield and Verona.

The mean stage of the Delaware River at Phillipsburg was 0.2 foot, and the highest 0.5 on three days. The mean stage at at Trenton was —0.2 foot, which was 1.6 feet below normal. The highest stage was —0.1 foot on the 15th.

Thunderstorms occurred at several stations on the following dates: 17, 18, 30 and 31. Dense fog was noted at various stations on the following dates: 10, 12, 13, 14, 17, 23 and 29. The fog was quite general on the 17th. Light hail fell at Lakewood on the 25th. Killing frost occurred on the 1st at Runyon and Belleplain and on the 2d at Layton and Hightstown, but with these exceptions killing frost was not general until the 18th and 19th. Killing frost has now occurred throughout the State except on the immediate coast. An aurora was observed on the 25th at Hammonton.

ERRATA.

September 1930. Highest pressnre at Verona should be 30-34 on the 1st instead of 30.28 on the 24th.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	54.2	82	**29**	4.20	5.85	2.91	.....	.....	.....	.....
1886	55.6	88	21	3.22	8.16	2.02	.....	.....	.....	.....
1887	52.3	89	21	2.61	5.00	1.58	.....	.....	.....	7
1888	49.2	*73*	25	4.73	7.00	2.97	.....	.....	10	12
1889	50.8	82	23	3.80	5.03	2.42	.....	.....	12	11
1890	53.9	81	24	6.33	10.18	3.40	9	8	14	13
1891	52.8	92	18	3.44	5.57	1.88	11	11	9	8
1892	53.6	85	21	0.52	*1.09*	0.04	14	12	5	4
1893	55.2	85	17	4.22	6.59	1.74	15	7	9	7
1894	55.3	87	27	5.67	8.23	3.90	12	7	12	10
1895	49.9	83	18	3.60	5.53	1.62	19	7	5	5
1896	51.5	82	21	2.24	4.58	1.72	11	8	12	8
1897	55.8	**95**	22	2.43	6.49	0.87	14	8	9	7
1898	56.5	88	24	5.76	8.42	3.92	13	9	9	10
1899	56.6	86	18	2.72	4.65	1.07	13	10	8	6
1900	**59.9**	92	19	3.70	6.59	1.47	10	8	13	10
1901	54.4	82	21	1.93	4.45	0.87	17	8	6	4
1902	56.0	80	20	6.39	9.35	3.82	15	7	9	8
1903	55.9	86	24	**8.92**	**16.19**	4.17	13	9	9	8
1904	51.9	89	15	3.78	7.01	1.50	20	6	5	5
1905	55.5	90	17	2.71	4.83	0.75	18	7	6	7
1906	55.0	80	*11*	4.46	7.14	2.66	8	9	14	11
1907	50.6	80	18	4.46	7.18	2.70	22	5	4	7
1908	57.3	92	19	2.71	5.14	1.30	15	5	11	8
1909	51.2	84	18	1.18	1.82	0.40	17	7	7	8
1910	57.2	90	18	3.15	5.55	1.55	15	8	8	7
1911	53.9	80	18	5.49	8.23	2.61	10	9	12	12
1912	57.0	88	25	3.30	6.95	1.72	17	8	6	5
1913	57.8	83	25	7.79	13.84	2.70	12	9	10	11
1914	58.1	88	19	1.99	3.08	0.90	13	9	9	5
1915	56.2	84	23	3.03	5.18	1.89	17	7	7	9
1916	55.1	92	23	1.37	2.38	0.51	18	8	5	4
1917	50.7	84	22	6.99	9.74	**4.28**	15	8	8	10
1918	57.0	84	22	1.25	2.36	0.74	16	9	6	8
1919	59.0	92	25	3.43	4.97	2.01	9	8	14	13
1920	59.0	87	28	1.80	4.53	0.55	20	5	6	5
1921	54.1	82	16	0.97	2.18	0.33	18	7	6	5
1922	56.6	92	18	1.48	2.70	0.55	19	6	6	7
1923	53.9	81	21	4.25	6.37	2.35	16	8	7	8
1924	54.4	84	16	*0.31*	2.76	*T.*	23	6	2	1
1925	*49.1*	84	12	4.59	5.78	3.38	9	9	13	11
1926	53.1	90	17	4.08	6.03	1.79	13	8	10	11
1927	56.8	94	23	7.82	14.07	2.81	18	5	8	10
1928	56.1	90	16	1.19	2.58	0.24	17	9	5	6
1929	52.3	80	17	4.61	7.35	2.62	15	8	8	8
1930	52.6	89	12	1.95	3.70	0.93	17	7	7	6

W. B. O.Philadelphia-11-25-30-1050.

Climatological Data for October, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	53.4	−0.4	85	6	24	21†	41	2.52	−1.15	1.18	0	5	17	7	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	50.2	−1.4	83	13	18	23	47	1.31	−3.16	0.60	T	5	16	4	11	nw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......	......	......	......	25	21	....	1.25	−2.93	0.45	T.	7	17	9	5	n.	Brice E. Riker.
Dover	Morris	600	46	49.9^{a}	−1.4	80^{a}	13	22^{a}	23	39^{a}	1.48	−2.59	0.63	T.	5	7	18	6	......	William C. Harris
Layton	Sussex	480	29	49.5	−2.0	82	10	18	21	46	2.41	−1.21	1.44	0	7	14	7	10	ne.	A. M. Depue.
Long Valley	Morris	520	....	49.4	......	80	12	20	23	44	2.00	....	0.70	0	6	18	10	3	w.	S. N. Dilts.
Newton	Sussex	769	46	52.0	−0.7	84	13	24	21	37	2.22	−1.41	0.76	0	6	12	9	10	sw.	Irving J. Kern.
Phillipsburg	Warren	363	47	52.2	−1.7	80	10†	26	23	36	2.31	−1.25	0.63	0	6	19	5	7	......	Town Engineer.
Sussex	Sussex	442	35	......	......	......	......	20^{e}	23	....	1.85	−1.59	0.75	0	6	....	....	....	......	A. J. W. Mowatt
Means and extremes	......	......	....	53.9	−1.3	85	6	18	23†	47	1.93	−1.91	1.44	T.	6	15	9	7	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	56.8	+0.6	77	13	35	20	22	1.49	−3.18	0.65	0	4	14	8	9	w.	William Mann.
Boonton	Morris	400	§40	49.8	......	83	13	21	21	45	0.93	−2.98	0.42	......	7	19	11	1	ne.	John Kline.
Chatham	Morris	185	26	......	......	......	......	......	......	....	1.29	−2.92	0.44	0	7	17	11	3	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	52.7	−2.7	82	13	25	21	37	1.44	−2.45	0.55	0	6	20	1	10	ne.	Union County Park Com.
Flemington	Hunterdon	140	§44	53.8	−2.2	89	13	24	23	47	2.12	−1.54	1.31	0	6	22	4	5	nw	Hiram E. Deats.
Jersey City	Hudson	10	32	55.5	−0.8	79	13	36	21	22	1.77	−1.91	0.71	0	6	14	11	6	n.	S. K. Pearson.
Lambertville	Hunterdon	430	43	52.4	......	78	13	27	20	29	2.45	−1.03	1.69	0	7	23	2	6	e.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	52.4	−2.5	85	14	24	21†	38	1.29	−3.22	0.54	0	8	20	6	5	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	52.6	−2.2	81	13	26	23	39	1.77	−1.81	0.65	0	4	19	6	6	n.	N. J. Experiment Station
New Milford‡‡	Bergen	......	12	......	......	......	......	......	......	....	1.48	....	0.55	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	......	......	78	13	......	......	....	1.10	−2.99	0.50	0	6	10	12	9	nw.	Vincent A. Messineo.
Plainfield	Union	120	42	52.7	−1.5	82	13	25	21†	37	1.31	−2.84	0.50	0	6	11	9	11	n.	S. K. Pearson.
Ridgefield	Bergen	80	13	52.6	......	81	13	26	23	39	1.80	....	0.81	0	6	14	8	9	nw	George P. Kirsten.
Somerville, near	Somerset	70	47	51.8	−2.5	85	13	20	23	45	1.41	−2.03	0.54	0	6	14	5	12	nw.	Julius Gerlich.
South Orange	Essex	200	58	......	......	......	......	......	......	....	1.46	−2.38	0.55	0	7	19	6	6	w.	Everett W. Bird.
Verona	Essex	490	4	51.9	......	78	13	30	21	31	1.30	....	0.47	0	8	13	10	8	n.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	1.61	....	0.58	......	8	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	60	55.0	−1.3	76	13	36	20	22	1.76	−1.77	0.77	0	8	10	11	10	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	52.9	−1.7	89	13	20	23	47	1.53	−2.41	1.69	0	6	17	7	7	n.	
The Southern Interior.																				
Belleplain	Cape May	30	36	50.8	−5.5	80	13†	12	23	46	2.00	−1.42	1.08	T.	7	7	8	16	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	47	54.4	−3.0	84	13	27	22	32	1.98	−1.61	1.30	0	5	20	6	5	ne.	Bennett K. Matlack
Burlington	Burlington	12	§44	54 0	−4.2	83	14	26	23	36	2.66	−0.99	1.91	0	5	20	5	6	nw.	Public Service Power Co.
Clayton	Gloucester	134	30	54.6	−2.2	87	13	22	23	48	1.63	−1.70	0.80	0	4	25	4	2	nw.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§24	53.5	......	85	13	24	23	41	3.70	+0.15	2.90	0	5	16	9	6	ne.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	36	51.8	−3.4	83	13	22	21†	40	2.02	−1.69	1.09	0	5	18	6	7	nw.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	52.7	−2.8	83	13	21	23	41	3.03	−0.41	2.08	0	4	16	8	7	n.	James M. Armstrong.
Lakewood	Ocean	54	26	51.6	−3.5	76	17	24	21†	36	2.53	−1.06	1.52	T.	5	16	4	11	ne.	R. W. Holman.
Moorestown	Burlington	......	67	53.0	−1.7	81	13	27	23	36	2.24	−1.33	1.09	0	6	17	4	10	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	......	......	......	......	......	....	2.23	−0.55	0.38	0	7	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	53.8	......	80	13†	25	23	39	1.73	....	0.99	0	3	15	5	11	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	51.6	......	74	13†	22	23	36	2.50	−0.94	1.50	......	7	26^{a}	1^{a}	3^{a}	ne.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	48.7	......	81	13	15	21	49	2.26	....	1.04	......	5	20	7	4	nw.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	54.0	−1.6	80	13	31	21	29	2.08	−0.70	1.30	0	8	18	4	9	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	5	......	......	......	......	......	......	....	1.98	....	1.17	0	7	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	54.0	−2.1	75	6†	26	21	39	2.66	−0.87	1.89	0	3	21	8	2	nw.	John H. Brown.
Philadelphia, Pa	......	117	59	56.7	−1.1	81	13	37	21	27	1.74	−1.07	0.99	0	7	17	6	8	n.	U. S. Weather Bureau.
Means and extremes	......	......	..	52.7	−3.0	87	13	12	23	49	2.33	−1.01	2.90	T.	5	18	6	7	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	52.4^{e}	−3.4	72^{e}	9	32^{e}	21†	34^{e}	2.46	−1.25	1.62	0	7	22	6	3	ne.	Information Bureau.
Atlantic City	Atlantic	16	57	54.7	−2.2	71	28	32	21	23	2.43	−0.77	1.72	0	7	17	7	7	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	55.2	−4.2	75	13	34	21	24	2.46	−0.84	1.80	0	6	15	11	5	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	51.8	−4.5	74	11	28	21†	32	1.79	−2.26	0.48	T.	7	16	8	7	ne.	William D. Martin.
Sandy Hook	Monmouth	22	32	55.4	−1.6	74	13	38	21	20	1.89	−1.89	1.06	0	6	12	10	9	ne.	U. S. Weather Bureau.
Means and extremes	......	......	....	53.9	−3.2	75	13	28	21†	34	2.21	−1.40	1.80	T.	6	16	9	6	ne.	
For the State	......	......	....	52.6	−2.3	89	13	12	23	49	1.95	−1.45	2.90	T.	6	17	7	7	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for October, 1930

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware									T.						1.18		.50							T.				.18	.06		.60	2.52
Charlotteburg	Passaic															.21			.34						.01	T.			.15			.60	1.31
Culvers Lake	Delaware									T.						.40	.02	.04	.25			T.			.04				.05			.45	1.25
Dover	Passaic															.13		.40								T.			.18	.14		.63	1.48
Layton	Delaware															1.44		.24	.19						.06	.03			.22	T		.23	2.41
Long Valley									T.						.39			.59							.06				.15	.11		.70	2.00
Newton	Delaware									T.						.39	T.		.76					.03				.13		.31		.60	2.22
Phillipsburg	...do									T.					T.	.62		.35	T.					T.	T.				.12	.05	.63	.54	2.31
Sussex	Hudson															.39			.75						.05				.14	.01		.51	1.85
The Red Sandstone Plain.																																	
Bayonne	Coast														.65									.04					.35		.45		1.49
Boonton‖	Passaic															.11	.01		.17										.07	.04	.11	.42	0.93
Chatham ‖	...do															.20	.12		.14						T.				.03	.09	.27	.44	1.29
Elizabeth	Coast																		.16						.03				.03	.35	.02	.55	1.14
Flemington	Raritan															1.31		T.	.08						.02				.06	.18	T.	.47	2.12
ersey City	Coast									T.					T.	.71		T.	.06						.02				.03	.46		.49	1.77
ambertville	Delaware									T.						1.69		.02	.10					.08			.04	.19				.33	2.45
ittle Falls.‖	Passaic															.16	.09		.23						.01				.05	.12	.09	.54	1.29
New Brunswick	Raritan															.65	T.		.14						T.					.37	T.	.61	1.77
New Milford.**	Hackensack														.14	.20		.22						.02				.06	.06	.23	.55		1.48
Paterson	Passaic								.03							.27		T.								.02			.03	.50		.25	1.10
Plainfield	Raritan									T.						.32			.14						.01	T.			.03	.31	T.	.50	1.31
Ridgefield**	Hackensack															.51		.14							.03	T.			.04	.27		.88	1.80
omerville	Raritan															.43		.01	.06										.05	.32		.54	1.41
outh Orange	Rahway															.40	.02		.10						.02				.09	.28	T.	.55	1.46
Verona**	Passaic									T.					.04	.43		.17	.02						.01				.05	.20		.38	1.30
Woodcliff Lake**	Hackensack														.10	.18		.38						.23				.09	.08	.17	.58		1.61
New York, N. Y***	Coast								T.	T.					.08	.69		.06	.01						.02				.03	.42		.45	1.76
The Southern Interior.																																	
Belleplain	Tuckahoe														.09	1.08	.02								.03					.40	.18	.20	2.00
Bridgeton	Coast														1.30	.02													.14	.27	.25		1.98
urlington	Delaware															1.91			.12										T.	.30	.03	.30	2.66
layton	Delaware															.80			.20											.33		.30	1.63
Hammonton	Mullica															2.90									.01					.45	.10	.24	3.70
Hightstown	Raritan															1.09	.04		.07											.44		.38	2.02
ndian Mills	Mullica															2.08														.45	.16	.34	3.03
akewood	Metedeconk									T.					T.	1.52			T.						.08	T.				.50	15	.28	2.53
Moorestown‖	Delaware															1.09	.46		.10											.17	.18	.24	2.24
orthfield	Coast														.13	1.23			.07						.02					.38	.26	.14	2.23
emberton															T	.99	T.		T.						T.	T.			T.	.45	T.	.29	1.73
leasantville‖	Coast										T.					1.50	.18		.04						.02					.16	.52	.08	2.50
unyon	Coast															1.04			.16										.03	.49		.54	2.26
renton***	Delaware									T.					.12	1.18		.05	.01					T.	T.				.01	.22	.06	.43	2.08
renton No. 2‖	Delaware										T.					.71	.46		.10										.01	.13	.11	.46	1.98
uckerton	Coast															1.89															.62	.15	2.66
hila., Pa***	Delaware									T.					.16	.83		.14						.01					T.	.30	.14	.16	1.74
The Sea Coast.																																	
sbury Park	Coast													.01	.07	1.62		T.						T.	.04	T.				.40	.10	.22	2.46
tlantic City***	...do								T.	T.				T.	.95	.78		.06							.03					.40	.12	.09	2.43
ape May City	...do									T.					.14	1.66			T.						.02					.38	.12	.14	2.46
ong Branch**	...do.									T.					.20	.39		.01							.13	T.				.48	.29	.29	1.79
andy Hook***	...do														.17	.89		.06							T.				T.	.42	.02	.33	1.89

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip- ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind	Highest			Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.07	30.43	22	29.63	15	13.7	50	nw.	25	79	60	72	67
ong Branch	30.05	30.40	22	29.57	25	......	......	......	......	73	63	61	......
oorestown	......	......	......	......	......	......	......	......	......	79	53	73	......
ew York, N. Y	30.06	30.41	22	29.55	25	12.2	54	nw.	25	70	53	61	69
hiladelphia, Pa	30.09	30.45	22	29.66	17	11.0	46	nw.	25	69	48	54	81
dgefield	30.06	30.42	22	29.55	25	......	......	......	......	......	......	......	......
andy Hook	30.05	30.39	22	29.56	25	12.9	44	n.	25	73	58	69	61
renton	30.07	30.44	22	29.66	25	8.4	38	nw.	25	75	49	60	66
erona	30.04	30.43	22	29.55	25	5.0	31	w.	25	78	48	70	......

Daily Temperatures for October, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	66	71	69	69	79	85	69	79	64	82	79	82	84	78	68	78	78	66	54	53	51	58	59	51	45	60	57	66	56	63	54	66.
	Minimum	35	32	38	35	40	50	45	55	54	47	47	46	43	44	56	45	48	37	28	28	24	25	24	41	37	35	25	41	51	45	40	40.
Charlotteburg	Maximum	61	65	65	62	65	72	73	71	69	75	74	79	83	80	70	76	73	68	51	49	49	52	57	52	44	57	60	65	62	60	55	64.
	Minimum	36	32	33	40	32	34	32	39	50	40	45	39	36	38	55	50	41	36	24	29	24	27	18	37	37	34	22	45	33	43	38	36.
Dover	Maximum	59	63	63	60	62	69	69	62	62	73	72	75	80	74	61	73	72	59	50	....	56	51	54	46	44	56	57	64	56	58	49	61.
	Minimum	36	37	37	37	36	39	38	40	52	43	49	43	41	43	55	49	46	31	27	....	29	23	22	37	36	35	25	41	37	44	38	38.
Layton	Maximum	62	65	63	65	66	78	73	68	63	82	77	79	82	77	60	78	75	63	52	48	49	55	55	45	48	57	58	65	56	61	48	63.
	Minimum	33	30	35	33	28	32	34	39	41	45	45	47	44	38	55	44	47	32	26	27	18	23	20	39	34	34	21	38	35	42	39	35.
Long Valley	Maximum	60	64	64	64	71	71	65	63	76	75	77	80	76	61	73	73	70	50	50	48	49	52	50	45	44	56	59	63	56	60	52	61.
	Minimum	39	38	36	38	42	37	39	51	40	45	45	36	39	55	45	40	35	25	30	32	23	26	20	39	36	35	23	40	36	44	39	36.
Newton	Maximum	63	66	65	65	68	73	74	68	60	78	78	78	84	81	67	79	79	54	53	50	50	58	48	44	59	62	68	60	60	60	54	64.
	Minimum	38	36	39	35	37	39	40	43	49	41	50	41	47	47	55	48	47	35	29	28	24	25	38	35	33	28	40	45	43	42	37	39.
Phillipsburg	Maximum	65	70	67	68	69	74	73	67	63	80	76	78	80	75	63	74	75	64	52	49	49	53	55	48	44	58	57	64	66	59	52	64.
	Minimum	37	38	40	40	37	38	39	48	55	48	47	47	44	45	57	46	50	40	32	31	27	27	26	39	38	35	27	42	40	48	40	40.
Sussex	Maximum	63	67	64	66	67	77	73	66	61	78	75	78	82	80	72	78	71	66	53	....	....	....	58	51	....	....	....	....	....	....	....	....
	Minimum	34	30	36	31	28	31	34	39	50	42	43	39	38	38	56	48	48	33	28	....	....	....	20	38	37	34	22	40	35	43	40	37.
The Red Sandstone Plain.																																	
Bayonne	Maximum	60	63	68	64	61	64	74	72	70	75	74	75	77	75	67	74	72	70	60	50	51	53	57	55	49	49	58	68	64	60	59	64.
	Minimum	50	48	56	46	46	47	52	54	50	56	58	60	63	60	56	57	55	52	40	35	40	40	38	44	42	40	50	54	53	50	42	49.
Boonton§§	Maximum	63	66	65	64	65	72	73	67	65	77	76	79	83	76	62	78	74	54	52	49	49	54	57	47	48	59	59	66	56	62	52	63.
	Minimum	39	35	35	41	47	38	40	40	52	43	49	41	38	40	47	45	45	40	29	34	21	27	20	25	39	38	24	27	39	44	40	36.
Elizabeth	Maximum	65	67	67	65	66	74	71	66	65	79	76	78	82	71	64	77	75	66	56	52	53	52	60	53	49	61	63	70	60	62	55	65.
	Minimum	40	39	39	44	42	42	42	42	43	42	54	49	46	46	43	42	51	41	29	31	25	32	26	43	33	39	29	43	39	48	42	40.
Flemington	Maximum	65	70	67	69	67	78	76	71	64	80	77	77	89	75	76	80	80	74	56	56	52	62	58	54	47	66	60	72	60	64	55	67.
	Minimum	36	41	38	43	33	45	42	43	53	44	52	46	42	43	57	46	50	40	28	33	25	29	24	41	37	38	25	41	39	46	39	40.
Jersey City	Maximum	62	65	61	62	63	74	72	67	69	76	77	78	79	70	63	75	71	54	52	51	52	52	56	53	48	58	61	67	62	59	54	63.
	Minimum	46	44	50	46	46	52	56	55	50	55	58	59	60	60	56	55	51	42	38	36	37	37	37	42	40	39	42	50	51	47	42	47.
Lambertville	Maximum	62	65	65	63	64	71	70	67	62	76	74	75	78	74	62	70	75	65	52	47	51	55	47	44	56	65	56	58	54	59	50	62.
	Minimum	38	38	42	44	38	42	46	47	52	47	54	50	49	51	56	49	52	39	30	27	28	28	38	36	37	45	46	46	42	40	39	42.
Little Falls§§	Maximum	65	67	67	67	66	75	75	72	69	79	79	81	85	73	62	81	76	57	55	53	55	56	60	48	52	62	62	69	57	64	54	65.
	Minimum	37	37	38	39	37	37	39	43	45	47	48	46	40	43	56	49	46	40	27	33	24	27	24	38	39	36	26	37	39	45	40	38.
New Brunswick	Maximum	63	67	65	64	66	73	71	67	63	77	75	75	81	72	64	75	74	65	54	51	50	55	58	54	49	61	61	68	60	59	54	64.
	Minimum	39	36	41	43	36	40	45	45	53	49	52	46	42	43	57	50	51	41	32	32	27	28	26	42	37	37	27	45	42	46	41	41.
Paterson	Maximum	65	67	63	64	65	70	72	65	76	70	75	77	78	70	64	72	70	67	55	54	55	55	52	55	52	56	59	66	64	59	57	64.
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Plainfield	Maximum	63	65	63	62	63	73	72	67	71	79	80	78	82	74	62	76	72	59	54	52	53	54	57	53	49	59	62	68	62	60	55	64.
	Minimum	39	40	42	38	39	45	43	43	51	51	52	49	45	44	55	48	48	40	29	29	25	34	25	42	37	37	26	40	44	45	42	40.
Ridgefield	Maximum	64	66	67	64	65	76	73	64	65	78	77	77	81	71	59	76	71	55	54	53	53	56	58	48	47	61	61	69	56	61	52	63.
	Minimum	38	38	40	41	40	40	44	47	51	48	52	46	42	46	54	52	49	40	32	34	27	31	26	44	37	37	31	46	44	44	40	41.
Somerville	Maximum	66	69	69	67	68	76	73	67	64	80	78	79	85	76	61	78	78	65	57	53	54	58	60	50	50	64	62	70	56	62	55	65.
	Minimum	35	34	36	38	33	38	38	39	52	45	50	45	40	41	57	45	47	39	26	28	22	23	20	38	37	37	23	42	37	47	41	37.
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Verona	Maximum	61	62	62	61	63	70	68	63	62	74	73	75	78	70	60	74	70	55	51	49	49	51	55	46	47	57	59	65	56	58	50	61.
	Minimum	40	40	44	41	41	42	46	47	57	48	55	50	47	51	55	50	49	40	32	32	30	32	31	38	37	36	35	45	49	45	39	42.
New York, N. Y.	Maximum	61	64	61	61	62	72	71	67	67	74	74	74	76	69	62	73	70	52	52	50	50	52	56	52	47	58	60	66	61	58	53	62.
	Minimum	46	45	51	46	46	50	56	55	50	55	59	60	60	60	56	56	52	42	39	36	37	38	37	41	40	39	42	50	52	48	42	47.
The Southern Interior.																																	
Belleplain	Maximum	66	68	71	66	68	74	73	66	68	79	79	77	80	70	70	73	80	71	60	52	54	59	58	52	50	60	62	73	60	60	55	66.
	Minimum	31	35	32	43	29	32	30	35	52	46	42	42	42	57	55	41	42	40	22	17	17	18	12	37	36	31	20	45	38	44	38	35.
Bridgeton	Maximum	66	69	72	68	70	75	78	65	69	79	78	79	84	72	72	70	73	58	58	51	52	56	58	52	53	61	61	72	59	62	59	66.
	Minimum	40	42	45	40	42	43	49	54	52	51	50	50	55	56	50	52	41	31	35	29	30	27	43	37	35	30	42	47	46	40	34	42.
Burlington	Maximum	68	63	66	65	66	73	72	70	76	77	78	80	82	83	82	69	81	79	54	52	55	53	56	53	50	60	62	70	66	62	60	67.
	Minimum	45	41	43	42	42	41	43	44	44	45	48	51	46	53	56	50	50	44	34	31	29	29	26	29	30	33	29	40	43	46	40	40.
Clayton	Maximum	69	74	76	72	72	84	82	67	75	84	83	85	87	78	73	74	82	64	61	52	53	57	61	53	51	61	61	75	58	67	54	69.
	Minimum	38	39	37	43	38	36	36	46	54	51	50	46	45	50	50	49	50	40	28	29	24	27	22	40	37	34	26	42	44	47	40	39.
Hammonton	Maximum	68	69	71	67	68	75	77	65	66	77	77	78	85	78	62	71	82	70	58	52	51	56	60	49	50	60	63	72	68	62	55	66.
	Minimum	37	35	39	41	34	38	36	40	55	49	49	47	44	51	57	48	52	41	31	31	26	27	24	42	37	37	27	48	42	47	42	40.
Hightstown	Maximum	66	67	68	66	67	74	73	68	66	80	78	77	83	74	64	73	81	70	62	50	50	54	60	50	46	60	63	68	56	62	54	65.
	Minimum	34	30	34	38	32	34	36	38	54	45	45	40	37	42	56	45	49	46	32	32	22	23	22	44	36	36	24	45	43	45	41	33.
Indian Mills	Maximum	64	66	67	64	65	71	77	66	63	75	76	74	83	71	67	71	81	72	60	53	57	54	60	53	48	58	64	72	66	62	54	65.
	Minimum	35	36	38	44	37	39	36	41	54	49	56	45	43	50	57	45	50	40	26	29	24	23	21	41	35	36	24	46	41	47	39	39.
Lakewood	Maximum	63	64	65	62	64	69	67	64	63	74	75	71	73	72	65	69	76	69	55	49	49	52	56	51	46	59	63	69	58	58	53	62.
	Minimum	39	39	39	42	38	43	38	38	53	45	50	43	40	49	59	48	50	44	28	34	24	28	24	42	36	38	27	47	40	47	40	40.
Moorestown	Maximum	64	67	68	65	67	73	75	67	63	77	77	78	81	74	63	69	80	58	57	49	52	55	58	48	47	59	62	71	57	61	54	64.
	Minimum	41	40	41	46	42	40	43	46	54	50	51	48	45	50	50	47	51	36	32	33	28	30	27	41	38	34	28	45	48	46	41	41.
Pemberton	Maximum	66	66	69	64	67	71	72	68	69	75	77	78	80	72	67	70	80	71	56	50	50	59	58	49	48	60	63	69	61	62	54	65.
	Minimum	41	40	42	45	39	41	39	44	53	51	50	48	41	50	58	49	50	44	30	34	27	26	25	44	38	37	27	47	46	47	41	41.
Pleasantville§§	Maximum	65	65	67	65	66	66	67	63	61	69	73	71	74	71	62	73	74	59	59	51	51	56	57	53	49	60	61	73	60	58	56	63.
	Minimum	38	39	38	44	35	39	34	38	53	50	47	46	47	59	58	45	50	43	41	26	25	24	22	35	36	36	25	41	43	47	41	40.
Runyon	Maximum	65	67	68	60	68	76	72	67	63	79	76	76	81	73	68	74	76	68	55	46	52	57	59	52	59	64	62	70	58	59	54	65.
	Minimum	29	27	30	40	31	32	31	36	53	47	43	47	32	37	38	44	45	40	22	25	15	22	17	41	32	30	18	43	29	41	41	34.
Trenton	Maximum	62	66	66	64	64	72	71	68	63	76	74	74	80	74	62	72	79	56	53	50	49	54	58	48	46	59	61	67	59	61	53	63.
	Minimum	43	43	47	46	42	47	50	50	53	51	56	53	52	51	56	52	50	39	36	34	31	33	34	40	38	39	35	48	51	48	42	44.
Tuckerton	Maximum	70	68	71	68	68	75	72	65	60	72	72	71	74	72	68	72	75	70	61	55	65	60	60	58	50	62	61	65	75	60	58	66.
	Minimum	35	36	38	43	38	50	48	47	48	46	55	48	48	55	56	48	56	44	42	28	26	27	28	38	32	39	28	40	43	45	40	41.
Philadelphia, Pa.	Maximum	63	57	68	66	66	73	75	67	67	78	78	79	81	74	67	70	80	56	55	50	50	55	57	50	48	59	60	70	60	61	54	64.
	Minimum	47	47	51	49	47	49	53	55	57	57	60	58	57	58	59	57	53	45	40	38	37	39	42	44	38	39	42	50	53	48	44	48.
The Sea Coast.																																	
Asbury Park	Maximum	64	65	66	64	64	68	66	65	72	71	71	70	....	....	....	63	68	50	55	45	51	57	52	67	55	60	61	63	64	66	55	62.
	Minimum	44	45	49	51	45	48	52	54	55	53	57	53	....	....	....	....	....	39	35	36	32	34	34	32	33	32	33	34	32	53	42	42.
Atlantic City	Maximum	64	62	63	61	64	65	66	63	60	68	68	68	69	66	62	69	70	62	59	52	51	54	57	53	48	61	58	71	60	57	55	61.
	Minimum	47	46	48	48	46	48	52	53	57	55	56	55	58	61	56	54	62	42	42	37	32	34	38	40	39	38	42	55	52	49	42	47.
Cape May City	Maximum	66	67	70	66	66	68	71	66	65	70	73	72	75	68	69	69	72	60	60	50	51	51	57	52	50	56	59	71	59	57	53	63.
	Minimum	47	44	46	47	44	44	48	54	56	54	52	53	55	63	55	53	58	42	40	40	34	38	34	46	41	41	43	53	50	48	43	47.
Long Branch	Maximum	62	63	63	62	61	70	64	62	61	72	74	66	70	66	63	70	71	66	53	50	48	52	55	48	46	60	62	65	57	54	52	60.
	Minimum	43	46	45	49	48	46	44	45	56	50	53	49	45	49	48	53	53	45	33	31	28	28	30	37	36	36	30	43	44	46	42	42.
Sandy Hook	Maximum	62	64	64	62	62	70	67	63	62	71	73	69	74	66	62	71	69	56	55	49	50	53	56	51	48	57	60	64	59	57	52	61.
	Minimum	50	51	53	51	51	52	56	57	55	56	60	58	56	56	58	57	55	44	41	39	38	39	41	43	41	41	40	49	53	50	44	49.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charg to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville••	Evaporation	.128	.160	.144	.160	.128	.128	.096	.064	.064	.128	.160	.128	.144	*	.048	.064	.136	.064	.096	.128	.064	.064	.052	.032	.128	.128	.032	.096	.040	.096	.112	3.
	Wind movement	60	51	86	63	27	45	48	50	55	36	44	41	57	120	27	12	80	65	43	48	25	46	21	77	172	57	53	31	20	40	74	1
Runyon	Evaporation	.180	.150	.120	.120	.120	.160	.140	.120	.100	.160	.140	.120	.140	.080	.040	.140	.080	.080	.100	.080	.080	.080	.085	.090	.100	.100	.080	.060	.050	.060	.020	3.
	Wind movement	25	8	20	39	18	15	20	20	20	11	11	19	12	15	22	23	12	51	59	40	8	15	17	19	80	26	20	32	15	19	14	

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followi ecord. ••Observations taken in the morning, and entered on preceding day. † Pan frozen.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. NOVEMBER, 1930. No. 11

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

A rather extended warm period prevailed from the 9th to the 24th inclusive, with cold periods on each side of it. The highest temperatures were mostly in the sixties and were observed on the 9th and 13th in the northern half of the State, and on the 9th, 13th, 15th and 17th, in the southern portion. The lowest temperatures reached were not greatly above the zero point, ranging from 2 degrees to 15 degrees above, and were recorded on the 28th and 29th. The only sudden change occurred with the cold snap starting from the 26th and culminating on the 28th and 29th, following which there was an even more rapid recovery on the afternoon and night of the 30th.

The rainfall was above the normal at the majority of the stations, the main exception being in the more southern counties where it still runs below normal. The greater part of the rain fell during the one period from the 14th to the 18th, inclusive, the remainder being mostly on the 4th and 5th. During the last decade there was not much precipitation. Snow flurries occurred at practically all stations. Sussex county, however, is the one that experienced measurable amounts.

Northeast gales prevailed along the middle and southern Coast section during the 4th, the highest velocity recorded being that of 72 miles per hour at Atlantic City. Over the Interior there were no particularly high winds, except those from the northwest on the 6th following this storm.

Main sunshine periods were from the 1st to the 3d, inclusive, 6th to 13th, 19-20th, and from the 23d to the 29th, inclusive. There was very little or nothing on other days.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 44.1°, which was 1.3° above normal. The highest temperature was 73° at Belleplain on the 15th, and the lowest, 2°, at Charlotteburg on the 29th. The greatest daily range of temperature was 47° at Runyon on the 30th. The highest monthly mean temperature was 48.3° at Cape May City, and the lowest, 40.5° at Layton.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +1.5°; Red Sandstone Plain, +1.5°; Southern Interior, +1.3°; Sea Coast, +1.7°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 3.70 inches, which was 0.52 inch above normal. The average total snowfall at 20 selected stations was 0.2 inch. The greatest monthly precipitation was 6.54 inches, at Bayonne, and the least, 1.41 inches at Northfield. The greatest amount of precipitation in any 24 consecutive hours was 2.48 inches at Long Valley on the 17-18th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 9, or 1 more than normal.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands, —9.30 inches; Red Sandstone Plain, —9.19 inches; Southern Interior, —9.46 inches; Sea Coast, —10.53 inches.

WIND.

The prevailing wind direction was from the west. The wind movement averaged 13 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 72 miles per hour from the northeast at Atlantic City on the 4th.

MISCELLANEOUS.

The per cent of possible sunshine was 52, or 6 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.18 inches, or 0.08 inch above normal. The highest reading was 30.83 inches on the 29th at Atlantic City, and the lowest 29.21 inches on the 9th at Ridgefield.

The mean stage of the Delaware River at Phillipsburg was 0.6 foot, and the highest 1.2 feet on the 18th and 19th. The mean stage at Trenton was 0.1 foot, which was 1 7 feet below normal. The highest stage was 0.7 foot on the 20th.

Dense fog was noted at various stations on the following dates: 12, 13, 14, 15, 16, 17, 18, 20, 21 and 22. Thunderstorms occurred on the 1st, 16th, 17th and 18th. Thunderstorms were quite general throughout the State on the 17th and 18th. Sleet occurred on the 25th at Ridgefield, Somerville, Dover and Phillipsburg. Auroras were observed on the 2d at Moorestown, on the 23d at Sandy Hook and on the 24th and 25th at Layton.

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COMPARATIVE DATA FOR NOVEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	44.8	76	18	4.53	7.90	2.72	......	......	......	......	......
1886	44.5	73	17	4.49	6.24	3.45	......	......	......	......	......
1887	41.5	72	13	1.94	2.60	0.95	......	......	......	......	6
1888	45.8	77	8	3.97	5.41	2.66	......	......	......	13	10
1889	45.7	69	13	**8.48**	**11.45**	4.70	......	......	......	13	13
1890	43.8	74	11	0.82	*1.10*	0.38	......	13	12	5	8
1891	42.2	70	6	2.39	3.47	1.54	......	12	10	8	4
1892	41.9	71	12	7.29	9.49	**4.74**	......	8	9	13	11
1893	41.8	70	11	3.48	4.53	2.19	......	10	11	9	7
1894	40.3	76	11	3.34	5.12	1.77		13	7	10	10
1895	45.7	80	12	3.17	5.10	1.56	0	12	7	11	10
1896	48.2	78	12	3.05	5.68	1.37	3.2	9	9	12	8
1897	43.8	74	10	4.59	5.95	2.42	1.3	8	11	11	12
1898	42.4	70	11	6.76	9.07	3.83	**14.7**	10	9	11	14
1899	44.0	71	17	2.29	4.32	0.72	1.1	15	8	7	7
1900	47.5	79	15	3.43	5.54	1.82	T.	9	10	11	9
1901	*38.5*	69	10	2.38	4.23	1.18	0.8	12	9	9	6
1902	**49.3**	80	20	2.20	4.17	0.87	0.2	10	11	9	8
1903	39.9	79	3	1.26	2.03	0.75	T.	16	8	6	6
1904	40.2	69	6	2.18	3.40	1.30	1.6	12	10	8	6
1905	42.1	70	6	1.84	2.86	0.54	0.1	12	10	8	6
1906	43.6	70	8	1.61	2.52	1 06	2.3	16	7	7	6
1907	43.5	*68*	13	5.65	6.95	4.19	0.8	10	8	12	13
1908	43.1	72	2	0.96	1.29	0.35	2.2	14	8	8	4
1909	46.4	80	12	2.36	4.33	1.32	2.1	13	8	9	8
1910	40.4	71	13	3.79	5.73	1.63	1.4	5	13	12	9
1911	41.3	73	13	5.17	6.50	3.17	1.7	8	11	11	10
1912	45.3	76	11	3.43	8.12	2.02	1.3	15	8	7	6
1913	46.2	77	**21**	2.71	4.89	1.00	T.	14	7	9	7
1914	43.3	80	6	2.60	4.81	1.21	0.7	16	8	6	6
1915	44.0	75	17	1.69	3.11	0.96	0	14	8	8	8
1916	43.3	75	12	2.11	3.81	0.80	T.	16	5	9	8
1917	39.8	*68*	9	*0.56*	1.15	*0.18*	0.7	19	5	6	3
1918	43.9	71	12	1.87	3.05	0.49	0	14	6	10	7
1919	43.7	76	13	3.74	6.18	1.98	T.	13	7	10	11
1920	43.0	74	12	4.41	7.90	2.14	0.2	9	6	15	10
1921	44.3	79	18	4.26	6.69	2.79	0.1	9	6	15	14
1922	44.3	73	13	0.91	1.56	0.49	0.2	13	8	9	6
1923	43.1	72	11	2.51	4.09	1.10	0	11	8	11	7
1924	42.9	77	*1*	2.03	3.23	1.17	1.3	14	8	8	5
1925	42.0	76	10	3.40	5.10	2.48	0.7	14	8	8	9
1926	42.5	76	8	4.04	7.19	2.44	T.	13	8	9	9
1927	47.9	78	15	4.02	8.68	1.74	0.1	10	8	12	11
1928	45.1	78	13	1.90	2.76	1.20	0.3	10	9	11	9
1929	44.5	**83**	4	2.73	3.64	2.08	0.4	10	7	13	10
1930	44.1	73	2	3.70	6.54	1.41	0.2	12	6	12	9

W. B. O.Philadelphia 12-22-30 1050

Climatological Data for November, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	42.9	+1.8	65	9	10	29	37	3.37	+0.13	1.10	T.	8	13	4	13	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	41.8	+1.7	66	9†	2	29	35	4.29	+0.77	1.07	0.2	11	10	2	18	sw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	......		......	......	......	......	....	3.31	+0.51	0.82	4.0	10	9	6	15	e.	Brice E. Riker.
Dover	Morris	600	46	41.0	+0.9	67	13	8	29	30	4.71	+1.07	1.15	T.	10	4	16	10	......	William C. Harris
Layton	Sussex	480	29	40.5	+1.7	68	9	3	29	44	3.00	+0.51	1.51	T.	9	10	3	17	sw.	A. M. Depue.
Long Valley	Morris	520	....	40.8	....	64	13	8	29	36	5.70	....	2.48	T.	9	9	10	11	nw.	S. N .Dilts.
Newton	Sussex	769	46	42.2	+1.7	67	22	6	29	33	3.60	+0.47	1.02	T.	9	6	8	16	ne.	Irving J. Kern.
Phillipsburg	Warren	363	47	42.6	+1 4	63	9†	12	29	35	3.05	−0.15	1.29	T.	10	9	8	13	......	Town Engineer.
Sussex	Sussex	442	35	41.6	+0.5	65	19	7	29	35	3.65	+0.40	1.15	2.0	10	13	3	14	n.	A. J. W. Mowatt
Means and extremes	....	......	....	41.7	+1.4	68	9	2	29	44	3.95	+0.46	2.48	0.7	10	9	7	14	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	47 2	+3.5	65	9	10	28	28	6.54	+3.27	1.50	T.	9	14	5	11	w.	William Mann.
Boonton	Morris	400	§40	40.8	. .	66	13	9	29	38	4.67	+1.10	1.17	......	8	12	4	14	ne.	John Kline.
Chatham	Morris	185	26	......	......	.. ..	......	....	......	....	4.96	+2.06	1.49	0	9	13	4	13	......	Paul Molitor, Sr.
Elizabeth	Union	45	51	45 0	+1.5	70	9	13	29	39	4.82	+1.57	1.20	T.	10	16	3	11	e.	Union County Park Com.
Flemington	Hunterdon	140	§44	44.2	+1.3	70	13	10	29	41	3.29	+0.17	0.83	0	9	17	2	11	w.	Hiram E. Deats.
Jersey City	Hudson	10	32	45.5	+1.5	65	9	16	28	29	5.53	+2.34	1.66	T.	8	9	6	15	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	43	42.7	....	64	9	9	29	28	3.08	−0.13	0.75	T.	9	16	2	12	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	43.6	+1.4	66	13	10	29	38	6.18	+3.28	1.67	0	8	16	5	9	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	77	44.2	+0.8	67	9	12	29	37	3.27	−0.21	0.68	T.	11	15	5	10	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	12	......	......	......	....		......	....	5.70	....	0.98	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	59	45.8	+2.3	65	9†	15	29	31	6.45	+3.28	......	T.	10	7	9	14	s.	Vincent A. Messineo.
Plainfield	Union	120	42	43.1	+0.6	66	9	10	29	38	4.44	+1.07	1.40	T.	8	11	9	10	sw.	S. K. Pearson.
Ridgefield	Bergen	80	13	42.9	......	67	9	12	29	34	4.68	....	1.18	T.	10	8	10	12	nw.	George P. Kirsten.
Somerville, near	Somerset	70	47	43.8	+1.4	69	9†	8	29	36	4.06	+1.02	1.06	0	10	10	6	14	w.	Julius Gerlich.
South Orange	Essex	200	58	......	......	......	......	......	......	....	5.59	+2.29	1.82	T.	10	12	9	9	sw.	Everett W. Bird.
Verona	Essex	490	4	......	......	......	......	......	......	....	....	....	......	......	....	....	....	....	......	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	......	......	......	......	......	......	....	5.70.	....	1.26	......	9	....	....	....	......	Hackensack Water Co.
New York, N. Y	....	365	60	45.8	+1.6	64	9	16	28	27	5.43	+2.47	1.77	T	9	7	8	15	sw.	U. S. Weather Bureau.
Means and extremes	....	......	....	44.1	+1.6	70	9†	8	29	41	4.94	+1.62	1.82	T.	9	12	6	12	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	44.4	−0.1	73	15	7	29	38	2.22	−0.39	0.76	T.	8	11	2	17	e.	A. F. Waldron.
Bridgeton	Cumberland	30	47	45.5	−0.1	68	9	12	28	37	2.25	−0.55	1.00	0	10	13	6	11	se.	Bennett K. Matlack
Burlington	Burlington	12	§44	46.0	+1.6	67	9	11	*29	34	3.36	+0.25	1.20	T.	9	9	7	14	ne.	Public Service Power Co.
Clayton	Gloucester	134	30	45.6	+1.3	70	17	8	29	39	2.48	−0.36	1.00	T.	13	16	1	13	w.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§24	45.8	....	72	17	8	29	35	1.69	−1.63	0.56	T.	9	15	5	10	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	36	44.1	+0.8	70	13	9	28	38	2.86	−0.45	0.74	0	8	15	6	9	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	45.4	+2.5	70	9†	5	28	45	2.07	−1.01	0.55	T.	9	9	11	10	sw.	James M. Armstrong.
Lakewood	Ocean	54	26	44.2	+1.4	66	9†	8	29	34	3.60	+1.14	1.20	T.	10	12	3	15	sw	R. W. Holman.
Moorestown	Burlington	......	67	44.2	+1.0	69	9	11	29	36	2.18	−1.07	1.26	T.	6	12	6	12	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	......	......	......	......	......	......	....	1.41	−0.97	0.34	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	45.8	....	70	15	7	29	34	1.69	....	0.57	T.	9	12	5	13	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	44.8^a	....	68	9	7	29	42	1.87	−0.85	0.68	......	8	16	7	7	ne.	N. J. Dept. Conservation.
Runyon‡‡	Middlesex	18	6	42.0	....	68	9†	4	29	47	3.75	....	1.08	......	9	14	8	8	nw.	N. J. Dept. Conservation.
Trenton	Mercer	190	58	44.8	+0.4	67	13	14	28	32	2.19	−0.54	0.90	T.	11	9	9	12	ne.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	5	......	......	......	......	......	......	....	2.21	....	0.82	T.	8	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	37	47.0	+2.9	70	9†	8	28†	40	2.62	−0.46	0.92	T.	6	12	2	16	ne.	John H. Brown.
Philadelphia, Pa	....	117	59	47.6	+1.9	69	17	17	28	28	2.36	−0.34	0.73	T.	8	8	9	13	sw.	U. S. Weather Bureau.
Means and extremes	....	......	.	45.0	+1.2	73	15	5	28	47	2.40	−0.53	1.26	T.	9	12	6	12	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	......	......	66	16	......	......	....	4.81	+1.89	1.60	T.	8	17	4	9	ne.	Information Bureau.
Atlantic City	Atlantic	16	57	47.6	+2.0	63	15	17	28	25	2.74	−0.08	1.06	T.	9	12	6	12	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	48.3	+0.9	66	15	16	29	25	2.15	−1.07	1.56	T.	8	9	11	10	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	43.4	+0.8	65	9†	13	29	29	4.13	+0.61	1.30	T.	10	10	6	14	w.	William D. Martin.
Sandy Hook	Monmouth	22	32	45.0	+0.4	63	9	17	28	23	4.09	+0.84	1.32	T.	11	8	10	12	sw.	U. S. Weather Bureau.
Means and extremes	....	......	....	46.1	+1.0	66	15†	13	29	29	3.58	+0.44	1.60	T.	9	11	8	11	w.	
For the State	....	......	....	44.1	+1.3	73	15	2	29	47	3.70	+0.52	2.48	0.2	9	12	6	12	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for November, 1930

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware				.10	1.10									.10	.23	.16	.88	.60							.20		T.					3.37
Charlotteburg	Passaic				.05	1.07	.06								.02	.88	.60	.75	.70							.11	T.	.02			.03		4.29
Culvers Lake	Delaware				.01	.69		T.					.01	T.	.06	.40	.38	.82	.43							.08		.20	.10		.13		3.31
Dover	Passaic				*	1.15	T.					.01			*	.89	.73	.50	.75						*	.12		T.			.56		4.71
Layton	Delaware				T.	1.51	T.						T	.01	.02	.03	.06	1.01	.08							.12					.16		3.00
Long Valley					.37	.82									.12	.68	.32	.51	2.48							.18		T.			.22		5.70
Newton	Delaware					1.02	.10							T.	.08	.32	.22	.79	.56							.12		T.			.39		3.60
Phillipsburg	...do				.03	.39									.19	.08	.21	1.29	.23	T.					.10	.02		T.			.51		3.05
Sussex	Hudson				.02	1.15									.03	.48	.38	.68	.39							.16		.20			.16		3.65
The Red Sandstone Plain.																																	
Bayonne	Coast				*	1.38								.01	.02	1.50	.90	1.15	1.18						.10						.30		6.54
Boonton ‖‖	Passaic					.35	.70							T.		1.17	.45	.80	1.17							.03	T.	T					4.67
Chatham ‖	...do					.70	.35								.03	1.49	.52	.69	1.12							.03	.03						4.96
Elizabeth	Coast	.01			.37	.94	.09						T.		.06	1 20	.48	.78	.79							.10		T.			T.		4.82
Flemington	Raritan				.16	.71							T.		.28	.83	.38	.58	.18							.09					.08		3.29
Jersey City	Coast				1.00	.45							T.		T.	1.66	.80	.54	.98			T.			T.	.04	T.	T.			.06		5.53
Lambertville	Delaware				*	.75							.05		.41	.61	.22	.52	.26			T.				.08		T.			.18		3.08
Little Falls ‖‖	Passaic					1.06	.40								T.	1.42	.73	.79	1.67							.09	.02						6.18
New Brunswick	Raritan				.55	.67	.03							.02	.10	.68	.22	.56	.26				T.			.11		T.			.07		3.27
New Milford.**	Hackensack				.75	.21									.89	.77	.98	1.65							.07						.38		5.70
Paterson	Passaic	T.			*	1.20							T.	T.	*	*	2.55	*	2.30						.05	.05		T.			.30		6.45
Plainfield	Raritan				*	.78						T.	T.			1.40	.41	.60	1.08						T.	.07					.10		4.44
Ridgefield**	Hackensack				*	1.18									.10	1.10	.43	.72	.96						*	.09		T.	T.		.10		4.68
Somerville	Raritan				.54	.40							.01		.18	1.06	.18	.61	.96							.06					.06		4.06
South Orange	Rahway	.03				1.24	.02								.03	1.82	.41	.75	1.16							.11		T.			.02		5.59
Verona**	Passaic																																
Woodcliff Lake**	Hackensack				.67	.35									1.26	1.06	1.24	.78							.07	.05					.22		5.70
New York, N. Y***	Coast				1.10	.24						T.	T.		.11	1.70	.82	.91	.38			T.			T.	.03	T.	T.			.14		5.43
The Southern Interior.																																	
Belleplain	Tuckahoe				.60	.30	T.								.76	.18	.05	.25	T.				.03			.05	T.				T.		2.22
Bridgeton	Coast				.07	.17							.07	.09	1.00	.06	.18	.06							.15						.40		2.25
Burlington	Delaware	.02			.12	.33	T.						T.		.12	.98	.30	.17	1.20			T.	T.			.12	T.						3.36
Clayton	Delaware				.09	.38	T.							.03	1.00	.08	.13	.26	.25	.02		.01	.02			.15	T.	T.			.06		2.48
Hammonton	Mullica				.13	.27	T.								.26	.56	.12	.29	.02							.02	T.	T.			.02		1.69
Hightstown	Raritan				.30	.74									.10	.66		.57	.21			T.				.14					.14		2.86
ndian Mills	Mullica				.17	.35	T.							.06	.16	.55	.18	.48	.05				T.			.07	T.				T.		2.07
Lakewood	Metedeconk	.08			1.10	.32							T.		.14	1.20	.15	.32	.15			T.	T.			.02		T.			.12		3.60
Moorestown‖‖	Delaware					.19	.16									1.26	.10	.35	.12				T.			T.							2.18
Northfield	Coast				.34	.31									.14	.31	03	.20	.02												.06		1.41
Pemberton					.16	.21	T								.09	.57	.09	.47	.01			T.				.04	T.	T.	T.		.05		1.69
Pleasantville‖‖	Coast					.34	.38								.08	.68	.04	.28	.05					T.		.02							1.87
Runyon	Coast				.76	.46							.09		.06	1.08	.18	.84	.23							.05							3.75
Trenton***	Delaware				.12	.26							.01		.68	.38	.24	.23	.01			T.			.04	.01	T.	T.			.21		2.19
Trenton No. 2‖‖	Delaware					.22	.28						.03			.82	.32	.30	.20			T	T.			.04	T	T.	T.				2.21
Tuckerton	Coast				.92	.27							.02		.30	.70		.41										T.					2.62
Phila., Pa***	Delaware				.08	.37	T.						T.	T	.65	.13	.20	.67	T.			T.	T.		.06	T.	T.	T.			.20		2.36
The Sea Coast.																																	
sbury Park	Coast				1.60	.33								T.	.25	1.53	.30	.55	.10							T.	T.				.15		4.81
tlantic City***	...do				.40	.33								.02	1.06	.03	.34	.02	.02				T.		T.	T.	T.				.52		2.74
ape May City	...do			T.	.16	.25							T.		.80	.81	.04	.02	.01				T.		T.	T.	T.	T.			.06		2.15
ong Branch**	...do	T			1.30	.70							.06		.43	.79	.36	.20							.02	.01	T.	T.			.26		4.13
andy Hook***	...do			.95	.27								.02		.24	1.08	.62	.67	.06			T.			.01	.01	T.				.16		4.09

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.20	30.83	29	29.31	25	15.4	72	ne.	4	80	69	76	55
ong Branch	30.19	30.82	29	29.28	25					80	71	72	
Moorestown										82	64	75	
ew York, N. Y	30.18	30.81	29	29.21	25	13.6	48	s.	30	78	68	72	52
hiladelphia, Pa	30.20	30.83	29	29.29	25	11.5	38	s.	30	71	62	65	55
idgefield	30.18	30.81	29	29.21	9								
andy Hook	30 16	30.82	29	29.22	25	14.1	58	ne.	4	80	69	74	47
renton	30.18	30.81	29	29.26	25	9.8	35	ne.	4	77	62	70	54
erona													

Daily Temperatures for November, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	48	51	54	46	51	48	44	51	65	56	53	56	63	62	61	61	57	57	56	55	53	64	57	55	51	49	34	25	31	40	....	51.8
	Minimum	35	22	24	33	42	32	26	24	31	34	29	37	47	44	54	56	52	52	51	35	35	45	32	18	35	24	24	13	10	23	....	34.0
Charlotteburg	Maximum	48	52	50	47	48	46	41	54	66	64	53	54	66	62	58	55	55	55	54	58	54	65	57	50	48	38	38	26	36	44	....	51.4
	Minimum	36	23	16	26	43	30	23	23	46	37	19	34	42	43	50	52	50	48	43	23	28	48	36	28	34	22	28	10	2	24	....	32.2
Dover	Maximum	47	48	48	48	49	44	42	55	64	56	50	54	67	57	57	56	55	56	54	55	53	64	53	54	47	39	32	24	30	53	....	50.4
	Minimum	29	21	20	31	40	27	24	25	37	34	23	36	52	45	53	52	51	48	37	30	31	45	29	25	29	23	16	11	8	25	....	31.6
Layton	Maximum	46	50	52	44	49	46	42	54	68	57	52	52	61	65	59	57	55	56	53	56	57	66	56	55	48	37	31	25	28	46	....	50.8
	Minimum	32	18	18	26	42	27	24	24	24	30	21	36	43	40	53	53	50	50	42	32	30	45	27	21	31	24	16	10	3	25	....	30.2
Long Valley	Maximum	44	48	49	47	50	46	40	52	62	55	50	43	64	59	59	58	56	57	55	55	53	62	57	53	57	37	31	24	29	45	....	49.9
	Minimum	34	22	19	30	43	31	25	21	26	35	25	33	43	43	52	53	55	51	38	29	30	41	31	24	33	22	20	11	8	23	....	31.7
Newton	Maximum	50	51	50	42	48	47	42	53	66	65	53	55	64	64	59	60	56	64	55	61	52	67	53	62	49	39	39	24	29	48	....	52.2
	Minimum	25	24	25	32	39	26	23	23	33	35	25	41	45	44	50	51	48	46	41	33	37	42	34	30	32	21	19	9	6	23	....	32.1
Phillipsburg	Maximum	46	47	50	45	52	46	42	54	63	55	52	56	60	59	60	59	56	58	54	54	54	63	52	54	47	40	32	26	31	53	....	50.7
	Minimum	37	26	25	34	44	30	25	23	28	35	34	38	47	44	55	56	55	53	43	35	37	42	34	30	33	26	19	15	12	21	....	34.5
Sussex	Maximum	46	49	50	45	48	47	41	52	65	59	51	54	63	62	60	59	55	54	54	54	53	63	56	55	52	38	37	26	31	50	....	51.0
	Minimum	38	18	20	29	40	30	25	20	30	29	22	37	43	40	53	52	50	49	44	32	31	49	33	22	35	23	25	11	7	25	....	32.1
The Red Sandstone Plain.																																	
Bayonne	Maximum	46	49	53	52	53	50	46	53	65	63	57	54	57	62	63	61	60	58	59	58	56	64	62	53	50	54	52	32	55	56	....	54.4
	Minimum	39	34	38	40	42	32	33	34	38	44	42	44	45	50	52	54	50	48	48	46	44	52	42	40	38	40	24	10	20	33	....	39.9
Boonton§§	Maximum	46	52	52	49	54	39	43	53	64	56	51	55	66	58	58	56	55	58	58	58	54	64	52	56	43	39	33	25	33	40	....	50.6
	Minimum	37	21	17	22	41	33	27	19	26	32	25	30	38	43	47	53	52	50	44	29	30	40	36	25	27	23	25	14	9	16	....	31.0
Elizabeth	Maximum	50	54	54	49	53	51	45	56	70	58	56	58	62	58	61	62	59	60	60	56	55	67	60	60	54	42	37	28	27	56	....	53.9
	Minimum	38	26	27	41	46	34	26	25	31	35	35	39	45	49	54	54	52	51	46	47	34	51	31	30	37	25	26	14	13	23	....	36.2
Flemington	Maximum	48	56	52	48	53	48	49	57	69	60	56	58	70	57	61	60	56	58	57	62	55	65	57	60	52	46	36	31	32	48	....	53.9
	Minimum	37	23	25	37	45	32	26	23	28	36	32	35	43	44	54	55	53	52	46	34	35	50	34	36	35	23	26	13	10	16	....	34.6
Jersey City	Maximum	45	50	54	51	51	46	45	52	65	56	50	56	60	61	62	58	58	59	57	56	56	63	54	55	50	43	34	28	33	55	....	52.1
	Minimum	37	33	36	44	44	32	30	32	36	42	40	45	50	49	52	53	50	48	47	43	42	47	41	44	32	29	26	16	17	30	....	38.9
Lambertville	Maximum	45	47	51	48	51	45	40	52	64	57	52	57	62	54	62	58	57	56	53	52	54	60	53	56	49	40	33	27	31	50	....	50.5
	Minimum	30	26	26	37	42	28	25	24	39	40	33	37	45	45	53	54	50	49	44	37	40	50	36	32	33	23	25	12	9	23	....	34.9
Little Falls§§	Maximum	50	53	55	49	53	42	45	59	67	59	53	56	66	60	59	56	55	58	60	59	55	66	55	58	43	40	35	29	45	58	....	53.3
	Minimum	39	23	23	32	43	33	27	22	32	35	25	37	43	46	48	53	52	49	45	32	32	44	37	28	38	25	26	14	10	20	....	33.8
New Brunswick	Maximum	49	52	51	50	54	50	43	55	67	61	53	59	65	55	60	58	56	58	55	57	55	61	57	58	50	42	38	28	33	58	....	52.9
	Minimum	39	27	26	40	46	33	26	26	33	38	32	38	44	46	53	53	52	50	46	35	34	51	34	30	36	25	26	15	12	21	....	35.6
Paterson	Maximum	51	54	52	50	52	51	42	54	65	62	60	50	64	63	59	62	57	55	57	56	55	65	60	56	50	45	40	42	38	60	....	54.2
	Minimum	32	29	29	35	32	35	32	47	34	40	34	41	41	49	49	45	52	50	34	37	37	49	39	32	37	36	34	16	15	53	....	37.5
Plainfield	Maximum	46	51	54	51	53	47	45	53	66	56	50	56	61	63	60	58	58	60	58	57	64	64	55	55	51	43	33	26	32	56	....	52.7
	Minimum	33	24	23	46	44	30	26	24	32	34	28	39	43	45	46	52	52	45	45	34	43	34	36	26	32	23	26	13	10	18	....	33.5
Ridgefield	Maximum	49	53	53	50	50	42	43	55	67	55	53	55	63	61	60	55	55	58	53	54	54	63	53	57	50	39	33	25	32	57	....	51.6
	Minimum	31	26	26	37	42	27	27	28	33	38	28	40	46	48	53	52	51	49	45	32	36	44	36	30	30	24	18	13	12	26	....	34.2
Somerville	Maximum	50	55	54	49	55	49	47	57	69	59	56	60	69	58	62	59	57	58	62	59	55	64	57	60	48	45	34	28	36	51	....	54.
	Minimum	36	22	20	39	47	34	24	21	25	32	27	35	42	46	55	55	54	52	46	32	32	51	32	26	36	22	20	14	8	18	....	33.
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
New York, N. Y	Maximum	46	50	54	51	52	46	45	52	64	56	50	56	60	60	62	58	58	59	57	56	55	62	54	55	50	43	34	28	34	55	..	52.1
	Minimum	37	34	38	44	45	31	30	33	37	43	42	46	51	50	54	54	50	49	47	45	43	48	41	44	32	29	20	16	18	33	...	39.
The Southern Interior.																																	
Belleplain	Maximum	50	54	56	58	56	50	44	53	66	53	55	64	70	60	73	68	70	64	58	61	61	61	58	60	53	47	36	24	37	60	....	56.
	Minimum	32	18	20	46	46	32	22	15	34	26	27	36	42	47	54	53	52	50	45	38	32	51	24	24	33	18	23	10	7	25	....	32.
Bridgeton	Maximum	48	54	57	55	52	44	45	55	68	64	60	62	67	60	67	63	70	60	53	62	58	60	58	54	44	45	30	27	45	56	....	54.
	Minimum	26	28	40	46	34	26	24	31	31	34	40	46	49	55	54	56	52	46	39	41	49	32	34	35	24	26	15	12	18	43	....	36.
Burlington	Maximum	50	50	57	56	53	50	44	54	67	58	53	62	65	60	63	63	63	58	62	58	53	60	58	60	56	42	40	30	34	57	....	54.
	Minimum	38	30	26	46	47	38	28	25	33	36	45	43	43	45	52	57	56	52	42	40	38	47	38	40	29	24	28	16	11	34	....	37.
Clayton	Maximum	48	56	59	51	57	52	46	58	72	65	67	62	69	59	71	68	70	66	56	63	67	60	56	60	55	47	37	26	36	59	....	57.
	Minimum	36	24	25	41	46	33	25	24	33	31	32	31	44	38	51	55	60	50	40	38	38	37	31	31	30	23	22	15	8	28	....	34.
Hammonton	Maximum	50	53	56	55	54	49	43	54	69	61	56	63	69	60	71	66	72	66	65	61	60	59	58	60	51	41	39	28	35	60	....	56.
	Minimum	35	26	24	41	48	34	23	24	34	34	31	39	41	44	55	56	58	52	45	38	36	53	34	29	36	21	26	15	8	27	....	35.
Hightstown	Maximum	48	53	54	50	52	48	44	54	66	58	57	61	70	60	67	64	62	59	54	60	56	60	55	60	54	42	39	29	36	58	....	54.
	Minimum	34	22	21	40	44	32	26	26	34	33	29	34	40	42	52	54	54	50	46	32	34	50	35	28	36	24	27	9	10	20	....	33.
Indian Mills	Maximum	48	53	56	51	54	48	48	55	70	65	55	64	70	60	70	67	68	68	58	62	60	60	59	60	53	45	41	27	34	60	....	56.
	Minimum	34	23	21	41	48	35	26	20	34	34	33	40	42	45	55	57	56	57	47	35	35	53	28	28	37	21	22	5	12	15	....	34.
Lakewood	Maximum	47	47	51	52	54	49	41	54	66	60	51	59	61	59	65	63	66	58	53	53	60	60	56	57	51	41	34	27	34	59	....	52.
	Minimum	36	25	23	47	48	37	27	24	35	40	30	35	41	44	54	58	56	51	42	36	33	54	31	27	38	21	27	15	8	25	....	35.
Moorestown	Maximum	48	51	54	52	53	44	42	54	69	59	56	62	66	57	66	64	68	57	54	58	55	59	56	59	44	43	29	26	32	56	....	53.
	Minimum	30	26	26	42	45	30	27	25	33	36	35	40	44	48	55	58	55	50	38	40	39	43	35	36	29	23	23	14	11	21	....	35.
Pemberton	Maximum	49	50	56	53	54	48	42	54	66	60	55	62	67	62	70	66	69	62	57	58	58	59	55	59	52	43	40	28	35	60	....	55.
	Minimum	37	26	26	42	48	37	28	24	32	33	35	39	43	47	55	58	57	52	47	38	37	55	32	32	38	23	23	16	7	26	....	36.
Pleasantville§§	Maximum	50	50	54	56	53	46	43	54	68	62	53	61	62	59	66	64	64	55	53	56	60	61	58	59	45	47	36	28	49	56	....	54.
	Minimum	33	23	33	40	49	35	22	23	32	35	31	38	45	48	53	55	56	52	48	40	35	50	30	26	33	18	24	11	7	....	....	35.
Runyon	Maximum	49	54	52	49	53	49	40	53	68	62	56	61	68	55	61	58	57	57	57	56	58	59	61	59	50	42	36	28	28	59	....	53.
	Minimum	37	18	16	40	47	32	26	18	25	27	26	34	40	46	50	53	53	50	33	30	28	28	30	21	36	23	26	14	4	12	....	30.
Trenton	Maximum	47	51	53	50	54	44	44	54	67	57	56	61	67	55	64	60	59	59	55	58	56	59	55	58	47	45	30	25	35	56	....	52.
	Minimum	35	30	31	41	44	29	28	28	35	41	36	42	47	46	53	55	52	49	44	41	44	47	38	38	30	27	20	14	15	28	....	36.
Tuckerton	Maximum	55	50	55	58	55	58	50	48	70	60	61	60	55	65	70	68	65	66	63	58	60	65	60	68	58	48	39	27	48	58	....	57.
	Minimum	24	37	27	42	41	46	22	25	36	35	33	40	45	43	55	58	53	50	54	43	35	55	44	38	34	20	25	8	8	27	....	36.
Philadelphia, Pa	Maximum	48	51	58	52	55	48	43	53	66	61	56	60	65	57	66	62	69	60	56	57	55	59	56	59	49	43	33	28	34	56	....	53.
	Minimum	40	36	33	45	48	34	30	33	38	46	41	47	52	52	57	59	57	54	48	48	49	51	43	44	31	30	22	17	19	34	....	41.
The Sea Coast.																																	
Asbury Park	Maximum	41	40	58	51	....	42	45	47	65	55	60	54	54	65	63	66	57	52	70	53	65	55	54	66	53	46	33	26	33	66	....	52.
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	..
Atlantic City	Maximum	50	49	51	57	54	46	45	52	59	58	52	59	56	57	63	61	60	57	52	55	57	59	56	57	54	47	33	28	42	55	....	52.
	Minimum	36	32	39	52	46	32	28	35	44	43	48	51	49	50	56	55	57	51	50	49	50	53	44	51	33	32	24	17	17	44	....	42.
Cape May City	Maximum	49	51	57	60	53	50	42	54	64	66	57	64	66	59	66	63	60	62	54	60	58	60	58	60	52	50	33	29	41	56	....	55.
	Minimum	36	34	34	51	49	34	30	33	41	42	46	46	47	53	54	54	56	52	50	44	51	52	41	48	34	32	24	19	16	41	....	41.
Long Branch	Maximum	45	44	50	48	49	42	43	55	65	52	51	54	56	53	65	60	64	56	53	56	61	62	54	55	51	37	33	26	34	58	....	51.
	Minimum	32	28	27	44	40	29	27	26	36	40	38	39	44	45	56	56	51	50	47	40	39	42	35	34	31	24	19	15	13	27	....	35.
Sandy Hook	Maximum	46	48	51	52	52	45	42	51	63	53	50	54	59	54	58	55	56	54	52	51	56	57	53	54	52	40	33	27	34	55	....	50.
	Minimum	39	36	40	46	45	31	31	33	40	44	41	44	48	48	52	52	52	49	47	45	44	49	42	43	33	30	22	17	21	32	....	39.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charg
to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	*	*	*	*	*	*	*	*	*	*	*	*	.032	.008	.040	.024	.050	.032	.064	.032	.032	.032	.096	.052	*	*	*	*	*	2.06	....	.
	Wind movement	59	28	82	147	88	97	51	64	64	29	34	2	39	51	53	40	49	10	121	26	54	48	32	52	90	92	93	87	42	123	....	1
Runyon	Evaporation	.060	.060	060	.010	.010	.060	*	.060	.060	.060	.060	.090	.040	0	0	.020	0	.040	.060	.060	.040	060	.060	.060	.070	0	*	*	*	*	....	1.1
	Wind movement	25	14	12	83	56	90	53	41	46	36	23	13	23	20	26	41	42	37	83	36	20	42	53	18	61	61	56	72	71	53	....	1

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followi
record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXV. DECEMBER, 1930. No. 12

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

There were but two real cold periods during December and they were of short duration. One of these occurred on the 2d and the other from the 15th to the 17th, inclusive; in both cases the wind was moderately high along the coast region, but during the second period it was not so high in the interior. A considerable majority of the days of the month were above normal. The highest temperatures recorded were mostly in the fifties and occurred quite generally on the 1st. The lowest were within a few degrees of the zero point and were registered on the 16th and 17th, except in the northwestern portion where they occurred on the 25th. Outside of the general drop of about forty degrees from the warm weather of the 1st to the coldest of the 2d, there were no radical changes in temperature.

While the month started with a general rain of moderate amount, the totals for the month indicate that the drought conditions of 1930 still prevail at the close of the year. The State average for December was just two-thirds of the normal amount. Most of what was received occurred during the last decade. December snowfall is subject to wide variations in amounts, as shown by past records. This month happens to be classed with neither extreme. The records show a range from more than ten inches in the Highlands to less than two in the coastal regions. Most of the fall was from one snowstorm which came just before Christmas, and the ground was practically bare thruout the month except for the period from the 23d to the 26th, inclusive.

There was no damage by wind or other weather agencies.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 33.0°, which was 0.4° above normal. The highest temperature was 60° at Tuckerton and Runyon on the 1st, and the lowest, 5° below zero, at Layton on the 25th. The greatest daily range of temperature was 38° at Flemington and Belleplain on the 25th. The highest monthly mean temperature was 36.6° at Cape May City, and the lowest, 28.4° at Layton.

The temperature departure from the normal for the year, 1930, to date, by sections, is: The Highlands, +1.4°; Red Sandstone Plain, +1.5°; Southern Interior, +1.2°; Sea Coast, +1.5°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 47 stations, was 2.67 inches, which was 1.35 inches below normal. The average total snowfall at 20 selected stations was 5.2 inches. The greatest monthly precipitation was 3.92 inches at Belvidere, and the least, 1.58 inches at Bridgeton. The greatest amount of precipitation in any 24 consecutive hours was 2.11 inches at Belvidere on the 27th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1930, to date, by sections, is: The Highlands, —10.32 inches; Red Sandstone Plain, —10.39 inches; Southern Interior, —10.96 inches; Sea Coast, —12.43 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 42 miles per hour from the northeast at Atlantic City and Sandy Hook on the 27th.

MISCELLANEOUS.

The per cent of possible sunshine was 43, or 9 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.06 inches, or 0.04 inch below normal. The highest reading was 30.65 inches on the 2d at Atlantic City, and on the 3d at Ridgefield, Long Branch and Trenton. The lowest was 29.42 inches on the 27th at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 1.0 foot, and the highest 1.7 feet on the 29th. The mean stage at Trenton was 0.4 foot, which was 2.2 feet below normal. The highest stage was 0.7 foot on the 12th.

Dense fog occurred on the 7th, 11th, 12th and 26th in scattered sections of the southern half of the State, and at Sandy Hook on the 12th. Hail was observed on the 12th at Atlantic City and Lambertville. Sleet was reported on the 14th, 18th and 19th from various points in the state. It was more general on the 23d and 27th. Parhelia were observed on the 31st at Ridgefield and New Brunswick.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	35.3	60	6	3.15	4.33	2.47	......	......	......	......	......
1886	29.1	60	−2	3.51	4.65	1.62	......	......	......	......	......
1887	33.7	62	6	5.29	7.32	3.64	......	......	......	12	10
1888	34.9	65	5	3.69	4.95	2.05	......	......	......	8	8
1889	**41.5**	71	8	1.62	3.69	*0.25*	......	......	......	9	9
1890	30.9	56	3	3.89	5.74	2.34	......	11	10	10	8
1891	40.9	71	**9**	4.25	5.32	2.25	......	13	9	9	8
1892	30.4	68	1	1.87	3.09	1.30	......	9	11	11	6
1893	34.9	70	5	3.39	4.66	1.67	......	11	10	10	11
1894	34.8	66	−3	4.36	6.39	1.64	......	12	9	10	9
1895	37.2	70	3	2.61	5.42	1.71	0.4	11	9	11	6
1896	31.3	64	−15	*1.43*	*2.70*	0.85	10.7	14	9	8	4
1897	35.1	69	−3	4.90	6.44	3.07	3.4	8	11	12	11
1898	33.3	66	−2	3.53	4.85	2.38	2.0	12	10	9	9
1899	35.5	69	−1	2.11	4.30	1.29	0.5	14	10	7	7
1900	34.4	64	−2	2.59	3.97	1.47	4.1	14	10	7	6
1901	32.6	68	−8	**7.30**	**9.45**	4.87	2.1	12	9	10	11
1902	31.7	62	−11	7.23	8.99	**5.81**	9.1	13	7	11	13
1903	28.6	56	−13	4.08	5.49	3.20	9.2	14	9	8	9
1904	27.0	60	−15	3.19	5.38	2.06	**21.1**	10	7	14	12
1905	36.3	61	5	3.65	5.60	2.58	1.5	14	8	9	7
1906	33.0	70	−5	3.99	6.18	2.70	1.4	9	8	14	13
1907	36.6	70	−3	4.91	7.13	3.55	5.9	12	8	11	9
1908	34.0	**72**	1	3.63	5.26	2.10	7.8	10	8	13	11
1909	29.8	60	−15	4.45	5.51	3.55	12.6	14	8	9	5
1910	26.5	58	−14	2.79	4.60	1.92	11.3	11	10	10	9
1911	38.4	70	2	3.77	5.09	2.94	5.6	10	7	14	11
1912	36.9	68	−1	4.73	6.33	3.40	11.0	12	9	10	9
1913	37.7	63	−11	3.03	4.59	1.47	0.8	13	9	9	7
1914	31.1	66	−9	5.33	9.12	2.99	2.4	10	6	15	12
1915	31.9	64	3	4.82	7.83	2.19	13.6	12	9	10	8
1916	32.3	70	−8	4.61	6.34	3.35	12.6	13	8	10	11
1917	*24.8*	*54*	*−21*	3.18	5.46	1.55	11.5	13	7	11	8
1918	37.5	66	**9**	3.92	4.94	3.21	0.5	12	7	12	10
1919	28.8	67	−18	2.98	5.14	1.84	6.8	10	8	13	12
1920	36.4	69	7	5.10	6.63	2.86	1.0	11	8	12	8
1921	32.3	64	−4	2.37	3.23	1.62	6.2	13	8	10	9
1922	32.5	65	−8	3.86	5.26	3.09	7.3	9	9	13	12
1923	40.8	69	**9**	4.14	5.14	2.44	2.6	13	7	11	12
1924	32.8	68	−4	2.58	3.42	1.85	0.4	10	8	13	8
1925	34.0	61	−5	2.84	4.58	1.08	0.6	13	7	11	10
1926	28.4	52	−7	3.44	4.74	1.67	8.2	11	7	13	11
1927	35.3	70	2	4.54	5.76	2.80	*T.*	13	6	12	12
1928	36.3	63	3	1.64	4.63	0.69	2.7	15	5	11	8
1929	33.8	68	2	3.01	4.34	1.00	4.1	11	6	14	10
1930	33.0	60	−5	2.67	3.92	1 58	5.2	10	7	14	8

W. B. O.Philadelphia-1-27-31-1050.

Climatological Data for December, 1930

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	31.4	+0.8	50	1	2	25	30	3.92	−0.15	2.11	10.0	10	12	3	16	...	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	38	30.6	+0.8	54	1	5	16	34	2.92	−1.41	1.46	12.8	9	12	2	17	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	29	...	...	...	...	...	...	...	2.49	−1.17	1.33	16.2	10	7	9	15	e.	Brice E. Riker.
Dover	Morris	600	46	30.0	+0.1	53	1	7	16	29	2.86	−1.44	1.61	8.5	10	5	16	10	...	William C. Harris
Layton	Sussex	480	29	28.4	+1.0	50	1†	−5	25	37	2.95	−0.99	1.60	16.0	9	5	6	20	w.	A. M. Depue.
Long Valley	Morris	520	...	29.9^a	...	53^a	1	2^a	25	30^a	2.85	...	1.60	8.5	7	8	13	10	s.	S. N .Dilts.
Newton	Sussex	769	46	30.7^a	+0.6	53^a	1	5^a	16	31^a	2.40	−1.31	1.23	10.5	8	5	7	19	nw.	Irving J. Kern.
Phillipsburg	Warren	363	47	32.0	+0.7	53	1	6	28	29	2.95	−0.79	1.23	7.3	7	13	6	12	...	Town Engineer.
Sussex	Sussex	442	35	29.8	−0.1	47	10	0	25	29	2.63	−0.93	1.24	13.0	8	10	7	14	n.	A. J. W. Mowatt
Means and extremes	...	...	...	30.4	+0.5	54	1	−5	25	37	2.89	−1.02	2.11	11.4	9	8	8	15	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	35.8	+2.8	56	1	9	16	31	2.55	−1.83	1.60	2.5	6	10	9	12	w.	William Mann.
Boonton	Morris	400	§40	...	...	...	...	4	17	...	2.59	−1.39	1.28	...	7	14	2	15	ne.	John Kline.
Canoe Brook	Essex	173	...	30.6^a	...	51	18	0	25	36	2.97	...	1.52	...	7	14	4	13	w.	N. J. Water Policy Comm.
Chatham	Morris	185	26	...	...	...	...	...	...	...	3.82	−0.35	1.39	4.9	10	12	8	11	...	Paul Molitor, Sr.
Elizabeth	Union	45	51	34.8	+1.5	59	1	9	17	32	2.99	−0.97	1.80	3.8	10	11	4	16	ne.	Union County Park Com.
Flemington	Hunterdon	140	§44	33.5	+1.5	55	1	0	25	38	3.08	−0.68	1.56	7.3	9	16	2	13	w.	Hiram E. Deats.
Jersey City	Hudson	10	32	35.2	+1.1	56	1	9	16	23	2.65	−1.28	1.45	4.5	9	8	6	17	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	43	32.0	...	54	1	9	16†	32	2.85	−1.02	1.39	7.9	8	14	4	13	nw	Wm. J. Lauderdale.
Little Falls	Passaic	180	§27	33.4	+1.9	50	10	8	17	36	3.06	−1.03	1.71	...	9	9	12	10	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	77	33.8	+0.6	59	1	9	17	29	2.40	−1.27	1.35	4.5	8	10	13	8.	nw.	N. J. Experiment Station.
New Milford‡‡	Bergen	...	12	...	...	...	...	...	...	...	2.61	...	1.42	...	7	...	...	...	...	Hackensack Water Co
Paterson	Passaic	80	59	34.4	+1.3	57	1	10	16	30	2.25	−1.81	1.25	3.5	8	11	5	15	nw.	Vincent A. Messineo.
Plainfield	Union	120	42	33.8	+1.1	55	1	7	17	28	2.36	−1.70	1.14	5.1	8	10	6	15	nw.	S. K. Pearson.
Ridgefield	Bergen	80	13	32.0	...	56	1	8	16	35	2.49	...	1.51	7.0	8	8	7	16	nw.	George P. Kirsten.
Somerville, near	Somerset	70	47	33.2	+1.0	57	1	3	25	34	2.30	−1.55	1.25	4.4	8	8	10	13	nw.	Julius Gerlich.
South Orange	Essex	200	58	...	...	...	...	...	...	...	3.20	−0.72	2.09	4.1	7	7	9	15	w.	Everett W. Bird.
Verona	Essex	490	4	31.5	...	55	1	8	16	34	3.19	...	1.59	5.4	11	...	...	...	w.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	12	...	...	...	...	...	...	...	3.02	...	1.70	...	7	...	...	...	...	Hackensack Water Co.
New York, N. Y	...	365	60	35.0	0.0	56	1	9	16	30	2.65	−0.97	1.90	4.2	12	6	7	18	nw.	U. S. Weather Bureau.
Means and extremes	...	...	...	33.4	+1.4	59	1	0	25	38	2.80	−1.20	2.09	5.0	8	11	7	18	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	36	32.5	−2.6	57	1	−3	17	38	2.92	−1.03	1.01	4.0	11	6	4	21	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	47	33.5	−2.7	56	11	9	16	33	1.58	−2.24	1.18	2.0	5	15	1	15	w.	Bennett K. Matlack
Burlington	Burlington	12	§44	34.8	+1.0	57	1	9	17	28	3.13	−1.19	1.79	4.4	8	9	9	13	nw.	Public Service Power Co.
Clayton	Gloucester	134	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	G. E. Lamb.
Hammonton (near)	Atlantic	80	§24	34.0	...	57	1	7	17	25	2.62	−0.98	1.18	5.3	7	12	7	12	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	36	33.5	+0.9	56	1	8	17†	29	2.29	−1.40	1.20	4.5	5	13	5	13	w.	Charles Welsh.
Indian Mills‡‡	Burlington	76	41	33.6	−0.2	57	1	0	17	35	3.33	−1.07	1.44	7.0	8	9	9	13	nw.	James M. Armstrong.
Lakewood	Ocean	54	26	34.2	+0.7	57	1	8	17	23	2.59	−2.05	1.20	2.0	9	11	5	14	nw.	R. W. Holman.
Moorestown	Burlington	...	67	32.8	−0.7	52	11	9	17	26	2.27	−1.42	1.64	4.0	7	10	7	14	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	23	...	...	...	...	...	...	...	2.39	−1.73	0.84	3.0	8	...	...	...	...	William L. Flick.
Pemberton	Burlington	55	...	34.2	...	57	1	6	25	32	2.54	...	1.45	5.8	7	12	4	15	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§32	32.4	...	51	12†	2	17	35	2.94	−1.30	1.12	...	11	15	7	9	nw.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	6	32.3	...	60	1	−1	25	37	2.94	...	1.58	...	7	14	12	5	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	58	33.7	−0.7	57	1	11	16	35	2.33	−1.02	1.78	3.8	7	9	8	14	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	5	...	...	...	...	...	...	...	2.52	...	1.76	5.1	9	...	...	...	...	Edward H. Ristow.
Tuckerton	Ocean	23	37	35.8	+1.4	60	1	5	17	35	1.92	−2.59	1.25	4.0	8	12	4	15	ne.	John H. Brown.
Philadelphia, Pa	...	117	59	36.6	+0.3	57	1	14	16	31	2.50	−0.93	2.08	2.1	8	8	10	13	nw.	U. S. Weather Bureau.
Means and extremes	...	...	...	33.6	−0.3	60	1	−3	17	38	2.55	−1.50	1.79	4.2	8	11	7	13	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	41	...	...	...	...	...	...	...	3.00	−0.85	1.65	1.1	6	15	11	5	nw.	Information Bureau.
Atlantic City	Atlantic	16	57	36.4	0.0	55	1	14	16	27	2.27	−1.67	0.91	2.6	12	11	5	15	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	46	36.6	−1.4	56	12	15	16	29	1.97	−1.81	0.80	3.4	11	8	8	15	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	21	32.1	−2.0	57	1	10	17	32	1.52	−3.22	0.39	0.9	13	9	7	15	w.	William D. Martin.
Sandy Hook	Monmouth	22	32	34.9	+0.5	55	1	13	16	28	2.09	−1.95	1.33	0.8	12	9	4	18	w.	U. S. Weather Bureau.
Means and extremes	...	...	...	35.0	−0.7	57	1	10	17	32	2.17	−1.90	1.65	1.8	11	10	7	14	w.	
For the State	...	...	...	33.0	+0.4	60	1	−5	25	38	2.67	−1.35	2.11	5.2	8	10	7	14	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vinceutown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for December, 1930

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.53					.02	.04				T.	.13							T.	.19			.45	.12		.30	2.11		.03	T.		3.92
Charlotteburg	Passaic	.63										.03	.16								.15			.14	.14		.17	1.46			.04		2.92
Culvers Lake	Delaware	.25					T	T.	T.			.04	.18								.12	T.	.04	.24	.20		.08	1.33		T.	.01		2.49
Dover	Passaic	.20						.04					.15							.10	..	.01		*	.65		*	1.61			.10		2.86
Layton	Delaware	.13										.04	.18	T.							.17		.02	.46	.07		.28	1.60					2.95
Long Valley	Morris	.50						.02	T.			T.	.14								.17			.32	.10			1.60					2.85
Newton	Delaware	.30						T				T.	.18							T.	.11		.22	.16			.18	1.23		T.	.02		2.40
Phillipsburg	...do	.06					T.	T.				.04	.09							.09	T.	T.		.69	T.		.75	1.23	T.		T.		2.95
Sussex	Hudson						T.					.04	.12								.20			.30	.50		.21	1.24			.02		2.63
The Red Sandstone Plain.																																	
Bayonne	Coast						.10	.02					.20							.38				.25				1.60					2.55
Boonton ‖‖	Passaic	.56							T.				.09	T.							.12		T.	.02	.08			1.28	.42		T.		2.59
Canoe Brook	Essex	.41						T.					.10	T.							.08		T.	.18	.72			1.52	.56	T.	T.		2.97
Chatham ‖	...do	.46						T.	T.				.11	.21							.06		T.	.39	.34	.06		1.39	.77	T.	.03	T.	3.82
Elizabeth	Coast	.22	T.					.04					.08							.02	.09		T.	.40	.07		.26	1.80		T.	.01		2.99
Flemington	Raritan	.25						.02				T.	.06								.14		T.	.68	.11		.23	1.56		T.	.03		3.08
Jersey City	Coast	.10					T.	.01				*	.05							T.	.11			.32	.10		.50	1.45	T.		.01		2.65
Lambertville	Delaware	.06											.16		T						.09			.62	.04		.46	1.39			.03		2.85
Little Falls ‖‖	Passaic	.36											.10	.03							.11		T.		.22	.15		1.71	.36		.02		3.06
New Brunswick	Raritan	.26				T.			.02			T.	.07		T.					T.	.06			.32	.05		.27	1.35					2.40
New Milford.**	Hackensack											.17	.05							.09			.18	.10			1.42	.60					2.61
Paterson	Passaic							.01	T.			.11	T.		T.					.11		T.		.17	.12		.45	1.25	T.		.03		2.25
Plainfield	Raritan	.15					.02					.05	T.		T.					.06				.34	.08		.50	1.14	T.		.02		2.36
Ridgefield**	Hackensack	.32						T.				T.	.10								.09		T.	.30	.17			1.51			T.		2.49
Somerville	Raritan	.10						.01					.05								.05			.33	.06		.45	1.25			T.		2.30
South Orange	Rahway	.48											.10								.05			.22			.24	2.09			.02		3.20
Verona**	Passaic																																.....
Woodcliff Lake**	Hackensack											.14	.06							.12			.21	.19			1.70	.60					3.02
New York, N. Y***	Coast	.11					T.	.01				.05	.03							.10	.01		.01	.31	.10		.63	1.28	T.		.01		2.65
The Southern Interior.																																	
Belleplain	Tuckahoe	.70					.02	.04	T.				.03		.02				.02	T.	.10			.50	T		.38	1.01		.10	T.		2.92
Bridgeton	Coast						.08														.08		.18					1.18	.06				1.58
Burlington	Delaware	.47	T.					.08					.03		T.					T.	.08			.35	.02		.31	1.79					3.13
Clayton	Delaware																																.....
Hammonton	Mullica	.73						02					T.							T.	.09			.46	T.		.12	1.18		.02			2.62
Hightstown	Raritan	.27						T.					T.		T.					T.	.06			.56	T.		.20	1.20			T.		2.29
Indian Mills	Mullica	.67				T.		.07							.04					.05	.14			.68	T.		.24	1.44					3.33
Lakewood	Metedeconk	.48						.06					.05		.02					T.	.13			.47	.03		.15	1.20			T.		2.59
Moorestown ‖‖	Delaware	.22						.02					T.								.08			.26	.01			1.64	.04		T.		2.27
Northfield	Coast	.58						.05					T.		.03					T.	.15			.62	T.		.09	.84		.03			2.39
Pemberton		.31						.03				T.	.01		T.					T.	.07			.52	T.		.15	1.45		T	T.		2.54
Pleasantville ‖‖	Coast	.46						.06				T.	.03		T.	.07			T.		.19		.65	.01		T.	.21	1.12	.11	.03			2.94
Runyon	Coast	.33											.07								.08			.42	.18		.28	1.58					2.94
Trenton***	Delaware	.03	T.				T.	.04	T.			T.			T.					.02	.02	T.	T.	.37	T.		.90	.95	T.		T.		2.33
Trenton No. 2 ‖‖	Delaware	.19	T.			T.		.03	T.	T.			T.	.06		T.					.05		T.	.22	.20	.01		1.61	.15	T.	T.	T.	2.52
Tuckerton	Coast							.04				.02	.05	.02	.03					.01	.20			.30				1.25					1.92
Phila., Pa***	Delaware	.04	T.				.05	T.					.03		T.					.03	.02	T.	T.	.21	T.		1.19	.93	T.		T.		2.50
The Sea Coast.																																	
sbury Park	Coast	.30							.10			T.	.05		T									.65	T		.25	1.65			T.		3.00
tlantic City***	...do	.14					.03	.03	T.			T.	T.		.08			.01		.28	.01		.13	.62	T.		.57	.35	.02				2.27
ape May City	...do	.15					T.	.07					T.		.03			T.	.03	.04	.15		.01	.49	T		.25	.70	.05	T.	T.		1.97
ong Branch**	...do.	.10					.02	.06	.01			.01	.09		.01					.16			.09	.16	.12		.39	.30					1.52
andy Hook***	...do	.05						.01	T.			.01	.04		T.					.11	.05		.01	.33	.05		.57	.85	T.		.01		2.09

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o
bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-
ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Highest			Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
							Miles per hour	Direction	Date				
tlantic City	30.06	30.65	2	29.43	27	14.5	42	ne.	27	80	72	72	46
ong Branch	30.05	30.65	3	29.42	1	......	......	......	......	78	64	70	......
oorestown	......	......	......	......	......	......	......	......	......	78	63	70	......
ew York, N. Y	30.06	30.65	3	29.51	9	14.2	55	nw.	2	71	61	64	46
hiladelphia, Pa	30.08	30.67	2	29.53	27	12.4	39	nw.	1	66	59	59	52
idgefield	30.06	30.65	3	29.50	9	......	......	......	......	......	......	......	......
andy Hook	30.04	30.63	3	29.49	27	15.1	42	ne.	27	79	70	72	35
renton	30.07	30.65	3	29.53	27	9.5	35	nw.	1	76	66	66	47
erona	......	30.63	3	29.49	9	.. ...	35	nw.	1	72	58	66	......

Daily Temperatures for December, 1930

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	50	44	38	41	39	38	39	43	46	48	44	44	41	34	31	25	29	47	37	41	40	39	34	34	35	35	37	35	35	35	32	38.4
	Minimum	30	14	14	22	28	33	34	37	36	38	29	38	31	24	21	9	6	24	25	26	20	16	29	23	2	22	33	31	15	27	17	24.3
Charlotteburg	Maximum	54	42	38	42	39	36	43	42	44	46	41	41	39	30	27	23	32	51	44	42	38	40	33	32	35	35	34	33	33	34	31	38.0
	Minimum	36	8	6	16	31	34	34	36	33	36	27	36	21	21	17	5	11	24	17	30	18	17	26	25	6	24	32	28	16	26	17	23.1
Dover	Maximum	53	28	38	42	36	37	43	42	44	46	39	41	39	32	28	25	31	50	41	42	40	38	35	33	34	34	36	34	35	34	31	37.5
	Minimum	24	12	10	19	26	30	33	35	34	29	28	37	27	24	12	7	9	22	22	29	17	22	32	18	10	15	28	28	19	20	17	22.4
Layton	Maximum	50	30	36	40	36	36	39	43	47	49	37	42	39	30	28	23	29	50	40	42	38	37	34	35	32	36	36	34	35	35	29	37.0
	Minimum	30	11	7	12	24	31	32	36	34	32	28	34	22	19	13	6	−2	19	18	24	13	6	23	24	−5	27	31	29	9	24	5	19.9
Long Valley	Maximum	53	42	36	42	40	37	42	42	45	46	41	43	41	30	30	22	31	46	38	39	39	....	38	33	32	34	36	35	35	35	30	37.8^{a}
	Minimum	23	12	10	19	28	32	33	35	34	28	21	37	25	23	15	8	6	22	22	23	15	....	19	24	2	20	32	30	21	25	17	22.0^{a}
Newton	Maximum	53	41	39	39	36	30	39	42	44	47	39	42	40	29	30	24	31	50	49	42	40	41	36	32	....	34	41	36	36	42	38	38.9^{a}
	Minimum	29	10	12	22	26	29	30	35	32	34	29	33	24	19	12	5	6	23	25	27	19	25	22	12	....	27	28	27	17	22	14	22.5^{a}
Phillipsburg	Maximum	53	27	38	42	40	38	41	45	49	49	44	45	42	32	29	24	31	45	39	41	41	37	33	35	35	35	37	35	33	36	33	38.2
	Minimum	26	16	17	23	33	34	35	40	37	34	31	40	30	26	17	12	10	26	25	28	23	20	29	20	6	28	34	29	20	23	22	25.8
Sussex	Maximum	45	41	36	39	38	36	39	42	46	47	45	42	41	28	29	22	32	43	40	40	38	38	34	32	27	35	36	35	35	34	32	37.0
	Minimum	37	12	10	17	28	31	33	36	34	39	38	35	24	20	19	8	7	21	20	20	17	12	25	20	0	20	32	30	11	27	15	22.5
The Red Sandstone Plain.																																	
Bayonne	Maximum	56	45	40	46	45	44	45	46	49	50	48	47	42	48	37	30	32	34	42	41	44	45	42	40	39	42	40	37	40	39	36	42.2
	Minimum	36	14	25	37	37	38	36	39	40	40	40	32	30	28	17	9	14	16	34	33	28	29	33	27	24	32	29	30	28	30	23	29.3
Boonton§§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	30	14	9	13	30	32	33	37	36	37	28	34	27	23	20	8	4	7	31	27	25	20	20	27	9	12	29	31	24	26	19	23.3
Canoe Brook	Maximum	47	26	40	43	39	38	45	45	47	48	41	42	....	37	32	25	32	51	41	43	42	38	36	31	36	36	38	35	37	37	33	38.7^{a}
	Minimum	38	14	11	17	25	33	34	37	35	37	26	32	28	....	21	8	4	15	19	27	18	14	20	27	0	18	32	30	15	23	15	22.4^{a}
Elizabeth	Maximum	59	47	43	47	41	43	48	50	48	50	48	45	46	35	31	22	32	52	42	45	44	40	39	35	37	39	39	39	39	39	37	42.0
	Minimum	40	15	15	22	38	35	37	38	37	39	31	41	29	26	21	10	6	26	25	29	22	23	32	28	14	29	34	30	23	28	21	27.3
Flemington	Maximum	55	42	42	45	40	39	45	49	51	50	44	48	45	36	31	30	32	53	43	47	43	38	35	37	38	35	39	35	36	39	35	41.2
	Minimum	39	15	13	20	30	32	35	38	35	36	38	38	30	25	22	9	6	26	26	30	22	26	29	25	0	22	32	29	23	27	21	25.8
Jersey City	Maximum	56	38	41	46	44	44	45	46	49	49	47	47	40	34	31	28	36	48	43	46	44	44	41	37	37	41	37	36	40	38	35	41.5
	Minimum	38	15	23	32	38	35	36	37	37	40	40	39	29	26	19	9	14	28	29	32	28	27	31	29	21	32	32	30	26	26	22	29.0
Lambertville	Maximum	54	30	38	43	39	44	42	45	47	56	46	44	41	32	30	24	28	46	39	41	39	37	33	33	34	34	36	33	34	34	31	38.3
	Minimum	25	14	14	25	32	30	34	38	34	34	36	39	25	25	18	9	9	26	29	29	25	19	29	23	17	28	30	27	22	27	21	25.6
Little Falls§§	Maximum	49	27	40	45	39	42	49	47	47	50	42	43	41	33	30	28	35	54	43	45	44	40	37	38	39	37	40	37	42	39	36	40.6
	Minimum	40	15	12	21	30	33	35	39	36	38	30	38	28	24	20	9	8	18	23	32	26	22	29	29	14	28	32	30	21	28	20	26.1
New Brunswick	Maximum	59	45	42	45	40	40	49	46	48	48	46	47	43	36	33	26	30	50	41	44	42	39	36	36	36	36	40	37	36	37	35	40.9
	Minimum	41	16	14	21	35	33	37	36	36	38	30	39	28	26	22	11	9	27	27	31	24	20	30	27	12	28	32	28	24	28	20	26.8
Paterson	Maximum	57	31	48	44	48	42	47	44	47	51	52	47	48	51	39	26	32	49	42	44	43	43	38	34	37	37	38	42	42	38	36	42.5
	Minimum	15	17	18	27	36	28	18	31	33	41	36	39	29	25	22	10	12	28	28	33	27	26	31	14	20	32	34	26	26	29	20	26.2
Plainfield	Maximum	55	38	40	46	40	44	45	48	49	49	48	47	39	34	31	26	37	48	44	47	44	44	41	37	35	41	36	36	40	38	35	41.4
	Minimum	38	14	12	20	35	36	40	35	38	37	40	40	28	25	19	8	7	20	26	30	21	24	26	28	11	28	32	29	21	28	20	26.3
Ridgefield	Maximum	56	25	38	44	40	39	45	47	46	48	43	41	36	30	28	26	30	50	40	45	43	40	36	33	37	34	35	35	37	36	32	38.5
	Minimum	21	15	17	24	34	33	35	36	36	33	33	38	25	24	14	8	11	25	28	30	25	23	30	22	19	29	28	28	22	26	18	25.5
Somerville	Maximum	57	42	42	46	41	40	46	50	49	51	45	44	41	34	32	28	31	52	41	46	46	40	35	35	37	35	40	36	39	39	36	41.2
	Minimum	40	15	11	18	31	34	37	38	35	38	27	40	28	23	22	8	5	26	23	29	20	18	29	25	3	26	34	27	23	28	20	25.2
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Verona	Maximum	55	22	37	42	38	37	45	44	45	46	40	42	35	30	27	23	31	48	40	41	40	37	35	34	34	34	36	34	36	35	31	37.2
	Minimum	21	13	15	25	35	32	35	36	35	34	34	35	24	23	13	8	11	28	31	32	24	23	30	24	19	20	33	29	23	27	19	25.8
New York, N. Y.	Maximum	56	27	41	47	45	44	46	45	48	49	47	46	41	34	31	29	36	48	43	46	43	44	41	37	38	41	37	36	40	38	35	41.3
	Minimum	26	15	24	33	38	35	35	38	37	41	39	39	29	27	14	9	15	29	33	32	28	27	32	29	22	33	30	30	27	26	22	28.8
The Southern Interior.																																	
Belleplain	Maximum	57	45	44	49	49	48	46	48	46	51	57	54	44	36	35	30	30	51	40	47	45	40	36	35	40	43	43	37	37	39	38	43.0
	Minimum	38	14	7	16	30	34	35	36	32	25	21	33	24	25	17	6	−3	23	22	27	15	10	27	21	2	29	33	25	19	21	18	22.0
Bridgeton	Maximum	50	27	44	48	49	46	45	48	47	50	56	51	45	35	34	26	33	48	41	46	44	38	35	35	39	40	39	37	38	37	35	41.5
	Minimum	17	15	23	33	35	35	38	34	31	32	36	30	29	22	11	9	22	22	29	22	20	30	25	16	16	36	29	21	25	22	26	25.5
Burlington	Maximum	57	44	42	43	45	42	46	47	48	49	47	46	44	38	34	27	28	50	46	46	44	42	38	36	38	36	39	37	36	38	36	41.6
	Minimum	44	17	15	29	38	34	36	40	37	36	33	37	29	28	25	12	9	28	26	32	28	23	31	26	10	27	30	30	29	28	23	28.1
Clayton	Maximum	56	44	42	46	51	....	....	....	....	....	....	....	....	....	40	22	30	50	39	46	43	39	34	30	38	38	38	37	35	36	37	......
	Minimum	41	17	15	22	33	....	....	....	....	....	....	....	....	....	17	10	7	30	26	30	21	18	30	12	5	31	34	29	21	26	22	......
Hammonton	Maximum	57	43	42	42	49	45	44	48	45	50	54	49	42	33	33	26	29	50	40	46	44	40	36	34	39	39	40	35	37	37	38	41.5
	Minimum	39	17	33	13	33	35	36	38	35	33	30	40	27	26	22	12	7	27	27	29	23	18	31	19	10	30	35	27	21	27	19	26.4
Hightstown	Maximum	56	43	42	44	42	43	45	46	47	49	49	48	42	35	30	24	30	50	40	44	45	41	36	35	37	36	39	37	38	36	36	40.8
	Minimum	42	15	16	18	35	33	35	37	35	34	29	39	29	25	20	9	8	34	27	30	29	16	27	26	8	26	32	27	23	27	22	26.2
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	52	43	32	32	27	29	50	40	43	45	46	....	34	37	36	37	36	36	36	35	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	40	28	27	23	10	7	26	26	30	23	19	....	20	4	28	32	28	24	28	23	......
Indian Mills	Maximum	57	45	45	47	48	44	43	47	45	50	53	52	42	40	32	28	28	48	45	46	45	45	38	37	38	39	38	38	37	37	38	42.4
	Minimum	43	11	10	18	35	35	35	38	35	33	30	40	28	27	24	12	0	26	25	29	17	15	30	17	5	26	34	25	19	25	19	24.7
Lakewood	Maximum	57	41	42	45	45	43	45	46	45	49	52	50	41	34	31	25	31	49	42	44	43	39	37	34	38	39	39	36	38	37	37	41.1
	Minimum	41	16	11	19	41	38	37	36	39	36	30	39	27	27	22	11	8	28	25	32	24	21	33	23	17	31	34	27	23	27	22	27.3
Moorestown	Maximum	49	25	42	44	48	40	42	48	48	50	52	43	41	33	30	25	28	49	40	45	44	40	33	35	36	36	38	35	36	36	37	39.6
	Minimum	34	15	16	22	37	35	27	40	35	35	32	40	29	29	15	10	9	28	28	30	24	20	28	18	13	32	31	31	25	27	22	26.0
Pemberton	Maximum	57	44	42	46	48	42	44	47	46	49	52	50	44	35	32	26	29	48	41	45	45	41	36	34	38	37	38	37	37	37	36	41.4
	Minimum	42	17	15	21	37	36	36	40	36	36	32	40	28	28	25	12	7	28	25	30	23	20	32	18	6	30	35	28	26	27	22	27.0
Pleasantville§§	Maximum	50	27	46	47	48	47	45	48	47	....	50	51	43	38	35	26	33	51	41	47	45	40	35	35	39	46	38	38	39	39	39	41.4
	Minimum	15	16	11	19	26	38	39	38	33	30	....	37	26	27	20	12	2	16	28	31	21	16	20	21	13	16	35	26	24	23	20	23.3
Runyon	Maximum	60	44	42	42	44	44	44	46	45	49	50	51	42	32	28	24	28	50	44	50	48	38	36	37	36	37	37	38	37	37	36	41.2
	Minimum	41	18	5	14	36	36	34	36	36	24	26	28	26	24	18	9	6	24	26	20	16	14	34	25	−1	27	34	24	20	22	24	23.4
Trenton	Maximum	57	25	43	44	42	40	44	46	48	48	47	46	40	33	30	25	34	51	42	44	44	40	33	35	37	38	38	37	35	36	38	40.0
	Minimum	22	16	20	27	34	34	35	39	37	36	35	40	29	26	15	11	13	30	32	31	27	23	28	22	17	30	34	31	25	27	24	27.4
Tuckerton	Maximum	60	40	48	48	50	58	48	50	48	50	52	50	46	44	35	26	30	50	45	49	45	48	40	35	40	41	45	46	40	38	40	44.7
	Minimum	35	15	13	28	38	38	39	35	37	42	35	38	34	30	20	9	5	26	29	29	20	17	30	20	15	35	33	34	22	25	20	27.0
Philadelphia, Pa.	Maximum	57	27	41	47	51	43	45	46	49	50	52	47	43	37	32	28	36	49	41	47	44	42	36	38	40	40	39	37	37	38	37	41.8
	Minimum	26	20	24	35	40	37	37	42	38	42	40	40	36	31	19	14	21	34	35	34	30	26	33	30	26	34	35	33	23	30	26	31.5
The Sea Coast.																																	
Asbury Park	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Atlantic City	Maximum	55	28	43	47	47	46	46	48	46	51	50	52	44	41	34	27	30	51	42	47	43	39	35	35	40	47	43	36	39	38	37	42.2
	Minimum	28	20	21	31	41	42	41	40	36	38	43	41	33	32	20	14	17	28	37	33	30	24	26	27	24	38	32	30	26	29	24	30.7
Cape May City	Maximum	55	28	46	50	51	50	46	46	49	50	55	56	44	42	36	26	30	46	43	45	46	40	35	35	41	46	43	37	37	37	39	42.9
	Minimum	26	20	19	30	36	39	40	39	38	38	40	40	32	32	21	15	15	28	38	34	28	22	31	28	22	36	33	31	30	30	26	30.2
Long Branch	Maximum	57	26	40	41	40	38	41	44	43	45	50	44	40	35	37	26	29	47	40	41	40	39	36	34	37	38	36	35	36	35	37	38.9
	Minimum	25	17	16	20	33	33	32	36	40	32	32	39	29	25	16	12	10	24	26	25	20	20	31	21	17	30	29	27	23	25	20	25.3
Sandy Hook	Maximum	55	27	41	43	44	40	44	44	45	46	46	43	40	34	32	25	33	46	39	41	41	39	37	36	37	38	39	36	36	36	34	39.3
	Minimum	27	18	23	33	38	38	38	40	38	40	39	40	32	29	18	13	18	32	33	33	30	28	32	29	24	34	34	32	29	28	26	30.5

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION,

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXV. ANNUAL SUMMARY, 1930. No. 13

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to he Superintendent of Documents, Government Printing Office, Washington, D. C. It furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The outstanding feature of the weather for the year 1930 was, f coure, the drought. Except for the interruption during June, he condition was one of persistent dryness and almost as coninuous warmth. During June, which was the only month to how more than normal precipitation, the average rainfall for he State amounted to 140% of the normal, whereas during the ther months of the year the average ranged from 88% of norial in December down to 57% in October; most of them were rom two-thirds to three-fourths of the normal, especially durng the growing months from March to October, inclusive. rom the middle of July to the middle of August the deleterious ffects of the dry weather were increased by high temperatures. n unusual succession of days with 90 degrees, or higher, ocurred, the peak for the season being registered on July 21st with he majority of stations reporting a maximum of 100 degrees or ver. It does not appear from the records that any one section the State suffered materially more than any other from the fects of the drought.

In temperature the annual average for the state is the highest nce 1921. The monthly departures indicate that April and ctober were the only relatively cool months, while February nd September showed the largest positive departures from the ormal temperature conditions. Zero or below-zero temperares were reached at nearly all stations, the exceptions being those stations most subject to urban influences. The last lling frosts of Spring occurred at about the normal date, and nged between the 24th and 29th of April. The first killing Autumn was observed about October 1st in the extreme northest portion and soon after November 1st along the seacoast; tween these two extreme sections they were recorded mostly October 18th and 19th. All of these dates are quite close to e accepted normal date of occurrence.

The snowfall during January and February (there was practilly nothing in March) was lighter than normal, the total for the riod amounting to about ten inches. In geographical distriition this ranged from an average total of about thirteen inches ong the southern seacoast section to about six inches over the stern interior. In November there were only a few scattered rries, except in Sussex county where moderate amounts fell. e December snowfall came mostly in the pre-Christmas storm, t the average for the month was still light. For the calendar ar the total fall was about one-half of the normal.

High lights in the sequence of weather events, aside from the ought, were the destructive forest fires of early May fostered the low atmospheric humidity and high winds, the severe nd squalls and the tornado of June and July, and the hail rm at Atlantic City and its vicinity in the latter month.

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Average precipitation	Average snowfall
	Mean	Highest	Lowest		
1885	50.5	100	−2	37.87	......
1886	50.2	98	−10	46.54	......
1887	51.1	102	−6	47.66	......
1888	50.0	99	−12	52.20	......
1889	52.8	95	−3	**63.33**	......
1890	53.2	101	0	49.34	......
1891	53.2	102	1	47.98	......
1892	51.4	105	−6	42.04	......
1893	50.8	103	−21	47.90	......
1894	53.0	106	−11	47.37	......
1895	51.7	**109**	−12	*37.29*	25.7
1896	51.7	105	−15	42.51	39.5
1897	52.0	102	−6	51.72	25.8
1898	53.2	107	−15	52.35	34.3
1899	52.1	103	−21	45.84	44.3
1900	53.8	104	−9	42.71	23.3
1901	51.4	107	−8	51.80	14.1
1902	51.8	100	−11	59.44	40.1
1903	51.7	100	−16	56.25	22.3
1904	*49.3*	100	**−34**	43.78	48.5
1905	51.3	102	−18	42.06	32.9
1906	52.8	98	−15	46.38	23.4
1907	50.4	96	−22	51.65	54.1
1908	52.6	106	−17	42.58	35.3
1909	52.0	100	−15	40.86	29.9
1910	52.0	99	−15	39.73	33.3
1911	52.6	104	−12	50.36	30.0
1912	51.3	100	−32	46.61	35.1
1913	**54.2**	100	−11	46.99	5.2
1914	51.4	99	−12	39.23	41.1
1915	52.5	98	−3	47.37	39.4
1916	51.2	100	−18	38.17	49.6
1917	49.6	104	−21	40.80	40.4
1918	51.2	108	−16	37.65	25.3
1919	52.5	103	−12	52.10	10.9
1920	51.2	98	−17	51.87	33.4
1921	54.1	100	−5	38.16	23.0
1922	52.6	98	−11	41.57	30.8
1923	51.9	106	−14	40.38	39.8
1924	50.7	102	−6	44.17	24.3
1925	52.1	103	−20	42.15	26.8
1926	50.0	105	−11	44.41	32.2
1927	52.0	99	−12	49.68	13.7
1928	52.0	99	−15	46.22	21.5
1929	52.3	102	−9	42.96	16.0
1930	52.8	105	−14	35.28	15.6

MONTHLY STATE DATA FOR 1930

Month	Temperature				Precipitation					
	Mean	Departure from normal	Highest	Lowest	Average	Departure from normal	Greatest	Least	Snow	Greatest.
January	31.7	+1.9	72	−14	2.92	−0.67	4.03	1.80	5.9	11.5
February	35.6	+6.2	80	−10	2.80	−0.80	5.13	1.07	4.2	8.5
March	40.0	+1.6	78	9	2.54	−1.32	3.80	0.44	0.1	1.3
April	47.6	−1.7	79	18	2.34	−1.31	3.72	0.50	T.	T.
May	62.7	+2.6	98	31	2.75	−0.98	4.50	1.54	0.0	0
June	70.8	+2.6	98	30	4.17	+0.47	6.48	2.46	0.0	0
July	74.3	+0.9	105	42	3.98	−0.66	6.45	1.85	0.0	0
August	71.1	−0.7	101	34	3.32	−1.61	5.58	1.92	0.0	0
September	69.4	+4.1	95	32	2.14	−1.44	4.96	0.44	0.0	0
October	52.6	−2.3	89	12	1.95	−1.45	3.70	0.93	T.	T.
November	44.1	+1.3	73	2	3.70	+0.52	6.54	1.41	0.2	4.0
December	33.0	+0.4	60	−5	2.67	−1.35	3.92	1.58	5.2	16.2
Year	52.8	+1.4	105	−14	35.28	−10.60	6.54	0.44	15.6	16.2

KILLING FROSTS

Stations	Last in spring	First in autumn
The Highlands and Kittatinny Valley		
Belvidere	Apr. 27*	Oct. 2*
Charlotteburg	do. 29*	Sept. 29
Culvers Lake	do. 29	Oct. 1
Dover	do. 29	do. 19
Layton	do. 29	do. 2
Long Valley	....	do. 18
Newton	Apr. 25*	do. 19
Phillipsburg	do. 24*	do. 19*
Sussex	do. 29*	do. 2*
The Red Sandstone Plain		
Bayonne	Apr. 24*	Nov. 6*
Boonton	June 1*	Oct. 19*
Elizabeth	Apr. 24*	do. 19
Flemington	do. 29	do. 19
Jersey City	do. 29*	do. 21
Lambertville	do. 24	do. 19
Little Falls	do. 27*	do. 19
New Brunswick	do. 24*	do. 19
Paterson	do. 24*	do. 19*
Plainfield	do. 27*	do. 19
Ridgefield	Apr. 24	Oct. 19
Somerville	do. 29*	do. 19
South Orange	do. 24*	....
Verona	do. 24	Oct. 21
The Southern Interior		
Belleplain	June 1	Oct. 1*
Bridgeton	Apr. 23*	do. 18
Burlington	do. 24*	do. 20*
Highstown	do. 24*	do. 2
Indian Mills	do. 27*	do. 19
Lakewood	do. 29*	do. 19
Moorestown	do. 24*	do. 19
Pemberton	do. 24*	do. 19*
Pleasantville	do. 30*	do. 20*
Trenton	do. 24	do. 21
Tuckerton	do. 25*	do. 20*
The Sea Coast		
Asbury Park	Apr. 24*	Oct. 21*
Atlantic City	do. 24	Nov. 7
Cape May City	do. 10*	do. 7*
Long Branch	do. 24	Oct. 20
Sandy Hook	do. 24	Nov. 6

* No frost reported; temperature 32° or below.

W. B. O.Philadelphia-4-9-31-830.

Climatological Data for the Year 1930

STATION	Counties	Elevation, feet	Temperature (degrees Fahrenheit)						Precipitation (inches)							Number days with .01 or more	Sky			Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall (unmelted)		Number clear days	Number partly cloudy days	Number cloudy days	
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	39	52.4	102	July 21	−3	Jan. 20	39	37.15	4.00	June	1.61	Sept.	21.8	93	215	65	95	......
Charlotteburg	Passaic	719	38	50.2	96	do. 21†	−4	Feb. 17	38	38.61	5.67	do.	1.31	Oct.	23.7	102	170	53	142	w.
Culvers Lake	Sussex	848	......	......	......	....	−7	do. 17	29	34.36	5.45	do.	1.25	do.	39.2	115	204	65	96	e.
Dover	Morris	600	46	50.3	100	July 21	−1	do. 17	46	38.85	5.36	do.	1.48	do.	20.9	95	87	168	100	......
Layton	Sussex	480	29	48.8	101	July 21†	−14	Jan. 20	29	35 86	4.48	June	1.70	Feb.	31.5	104	149	63	153	sw.
Newton	Sussex	769	47	51.0	99	do. 21†	−3	Feb. 17	44	32.68	4.30	do.	1.18	Sept.	25.1	90	125	95	145	sw.
Phillipsburg	Warren	363	39	52.4	102	do. 21	0	Jan. 20	47	35.37	5.41	July	2.00	do.	18.1	90	210	75	80	......
Sussex	Sussex	442	32	......	99	do. 21†	−8	Feb. 17	35	35.13	6.09	June	1.64	Feb.	......	96	......	......	......	w.
Means and extremes	......	......	......	50.8	102	July 21	−14	Jan. 20	......	36.00	6.09	June	1.18	Sept.	25.8	98	166	83	116	w.
The Red Sandstone Plain.																				
Bayonne	Hudson	37	32	.....	97	July 21	8	Feb. 16†	32	37.21	6.54	Nov.	1.49	Oct.	11.0	84	195	86	84	w.
Boonton	Morris	400	22	......	98	do. 21	−3	do. 17	40	32.82	4.67	do.	0.93	do.	......	94	177	34	154	sw.
Chatham	Morris	185	......	......	......	....	......	....	26	46.42	5.47	June	1.29	do.	14.5	118	206	69	90	......
Elizabeth	Union	45	46	54.0	105	July 21	2	Jan. 25	51	37.36	4.82	Nov.	1.44	do.	10.7	110	216	59	90	sw.
Flemington	Hunterdon	140	33	53.4	102	July 21	0	Dec. 25	44	34.73	5.51	July	1.31	Sept.	17.3	105	230	57	78	nw.
Jersey City	Hudson	10	32	54.5	103	do. 21	6	Feb. 17	32	35.35	5.53	Nov.	1.77	do.*	12.7	104	127	127	111	nw.
Lambertville	Hunterdon	430	43	52.2	99	do. 21	−1	do. 17	43	36.63	4.43	July	1.05	do.	19.5	110	228	44	93	nw.
Little Falls	Passaic	180	16	52.4	102	do. 21	−2	do. 17	27	42.29	6.18	Nov.	1.29	Oct.	......	109	185	80	100	nw.
New Brunswick	Middlesex	110	73	53.4	102	July 21	−1	Feb. 17	77	32.90	4.39	June	1.43	Sept.	8.8	96	176	118	71	w.
New Milford	Bergen	9	......	......	......	....	......	....	12	36.76	5.70	Nov.	1.48	Oct.	......	101	......	......	......	......
Paterson	Passaic	80	55	......	100	July 21	5	Feb. 17	59	38.26	6.45	do.	1.10	do.	14.0	99	125	117	123	sw
Plainfield	Union	120	39	52.4	102	do. 21	−2	do. 17	42	39.79	5.65	July	1.31	do.	14.7	92	115	147	103	sw.
Ridgefield	Bergen	80	13	52.1	101	July 21	0	Feb. 17	13	34.65	4.68	Nov.	1.80	Oct.	17.1	100	126	124	116	nw.
Somerville	Somerset	70	46	......	104	do. 21	−3	do. 17	7	32.97	5.47	July	1.28	Sept.	11.0	100	165	79	121	nw.
South Orange	Essex	200	58	......	102	do. 21†	......	....	58	33.32	5.59	Nov.	1.46	Oct.	......	104	159	89	117	w.
Verona	Essex	490	5	51.1	96	do. 21	0	Feb. 17	5	36.99	5.13	do.	1.30	do.	16.6	......	......	......	......	nw.
Woodcliff Lake	Bergen	100	.....	......	....	....	.....	....	12	40.44	5.70	do.	1.61	do.	......	103	......	... .	......	......
New York, N.Y.	....	365	60	53.9	99	July 21	7	Feb. 17	60	35.33	5.43	Nov.	1.37	Sept.	11.9	117	79	141	145	nw.
Means and extremes	......	......	......	52.8	105	July 21	−3	Feb. 17	......	37.29	6.54	Nov.	0.93	Oct.	14.0	102	174	88	103	nw.
The Southern Interior.																				
Belleplain	Cape May	30	35	53.2	103	July 21	−8	Feb. 17	36	29.90	4.38	June	1.05	Sept.	14.5	97	111	100	154	sw.
Bridgeton	Cumberland	30	42	......	103	do. 21	......	....	47	....	....	......	......	......	......	......	......	......	......	......
Burlington	Burlington	12	18	55.0	102	do. 21	6	Feb. 16	44	37.48	4.17	Aug.	1.75	Apr.	9.5	101	162	85	118	sw.
Hightstown	Mereer	120	36	53.1	102	do. 21	−5	do. 16	37	37.22	6.45	July	1.37	Sept.	11.5	80	210	62	93	w.
Indian Mills	Burlington	76	41	53.4	101	do. 21	−9	Feb, 17	40	36.15	4.38	June	1.72	Apr.	20.3	93	136	143	86	nw.
Lakewood	Ocean	54	26	53.0	99	July 21	−7	Feb. 17	26	37.25	5.29	July	1.60	Sept.	13.0	102	181	65	119	sw.
Moorestown	Burlington	75	67	53.3	100	do. 21	2	do. 17	67	36.94	6.48	June	1.43	Apr.	11.2	96	169	78	128	nw.
Northfield	Atlantie	25	......	......	......	....	.... .	....	23	28.61	4.59	July	0.44	Sept.	14.8	93	......	......	......	......
Pemberton	Burlington	55	......	64.4	100	July 21	−2	Feb. 17	......	33.27	5.99	June	1.40	do.	12.6	105	168	85	112	w.
Pleasantville	Atlantic	26	7	52.4	100	do. 21	−7	do. 17	32	30.35	4.37	July	0.67	do.	......	99	243	51	70	......
Runyon	Middlesex	18	6	......	......	....	......	....	7	34.80	4.66	July	1.60	Sept.	......	85	206	112	47	w.
Trenton	Mercer	190	58	54.0	101	July 21	6	Feb. 16	58	32.62	4.25	June	1.55	do.	9.6	128	127	113	125	nw.
Trenton No. 2	Mercer	105	......	......	......	....	......	....	2	34.22	4.27	July	1.78	do.	12.6	......	... ..	......	......	......
Tuckerton	Ocean	23	32	53.9	103	July 21	−3	Feb. 17	37	33.82	4.43	do.	1.59	Apr.	15.0	92	217	23	125	nw.
Philadelphia, Pa.	....	117	59	56.7	102	July 21	8	Feb. 16	59	33.97	4.96	June	1.51	Aug	7.5	108	107	134	124	sw.
Means and extremes	......	......	......	53.6	103	July 21	−9	Feb. 17	......	34.05	6.48	June	0.44	Sept.	13.1	98	175	83	107	nw.
The Sea Coast.																				
Asbury Park	Monmouth	22	40	......	104	July 21	......	....	41	34.92	5.28	July	0.44	Mar,	10.6	85	243	72	50	nw.
Atlantie City	Atlantic	16	57	54.6	102	do. 21	8	Feb 16	57	31.18	6.04	June	0.89	Sept.	13.2	108	127	133	106	nw.
Cape May City	Cape May	17	46	55.0	100	do. 21	8	do. 17	46	26.12	3.50	Jan.	1.07	Feb.	18.0	101	138	124	103	nw.
Long Branch	Monmouth	25	22	52.4	102	do 21	−2	do. 17	22	37.12	6.08	July	1.62	Dec.	11.3	121	139	117	109	nw.
Sandy Hook	Monmouth	22	32	53.5	96	do. 21	9	do. 16	32	33.64	4.10	Nov.	1.68	Mar.	7.3	115	111	126	128	w.
Means and extremes	......	......	......	53.9	104	July 21	−2	Feb. 17	......	32.60	6.08	July	0.44	Mar.	12.1	106	152	114	99	nw.
For the State	......	......	......	52.8	105	July 21	−14	Jan. 20	......	35.28	6.54	Nov.	0.44	Mar.†	15.6	99	172	89	104	nw.

* Also in October.

† Also in September.

Monthly and Annual Precipitation for the Year 1930, with Departures from the Normal

STATIONS	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	2.82	−0.72	2.12	−1.72	3.80	−0.05	3.28	−0.38	3.89	+0.06	4.00	0.00	2.45	−2.53	3.37	−1.24	1.61	−2.16	2.52	−1.15	3.37	+0.13	3.92	−0.15	37.15	−9.91
Charlotteburg	3.31	−0.24	1.83	−2.19	3.55	−0.65	3.72	−0.60	2.30	−1.90	5.67	+1.55	3.80	−1.03	3.92	−0.70	1.99	−2.43	1.31	−3.16	4.29	+0.77	2.92	−1.41	38.61	−11.99
Culvers Lake	1.80	−1.38	1.95	−1.11	3.02	−0.45	2.75	−1.07	3.96	+0.33	5.45	+0.84	2.36	−2.21	3.11	−1.31	2.91	−1.63	1.25	−2.93	3.31	+0.51	2.49	−1.17	34.36	−11.58
Dover	3.17	−1.22	2.19	−1.84	3.58	−0.41	3.06	−0.70	2.82	−1.12	5.36	+1.33	3.55	−1.72	3.14	−1.62	2.93	−1.16	1.48	−2.59	4.71	+1.07	2.86	−1.44	38.85	−11.42
Layton	2.07	−0.82	1.70	−1.04	3.17	−0.20	2.69	−0.92	2.23	−1.02	4.48	+0.69	2.67	−1.59	4.13	+0.23	4.36	+0.44	2.41	−1.21	3.00	+0.51	2.95	−0.99	35.86	−5.92
Long Valley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.67	.....	2.33	.....	3.07	......	1.81	......	2.00	......	5.70	......	2.85	......	.....	....
Newton	2.14	−1.47	1.82	−1.74	2.47	−1.10	2.97	−0.40	2.88	−1.05	4.30	+0.32	2.85	−2.11	3.85	−0.57	1.18	−2.63	2.22	−1.41	3.60	+0.47	2.40	−1.31	32.68	−13.00
Phillipsburg	2.30	−1.30	2.75	−0.89	3.17	−0.37	2.63	−0.63	3.32	−0.54	3.44	−0.19	5.41	+0.56	2.04	−2.58	2.00	−1.66	2.31	−1.25	3.05	−0.15	2.95	−0.79	35.37	−9.79
ussex	1.91	−1.57	1.64	−1.74	2.34	−1.25	2.20	−1.24	3.24	−0.48	6.09	+2.41	2.10	−2.30	4.49	+0.23	2.99	−0.91	1.85	−1.59	3.65	+0.40	2.63	−0.93	35.13	−8.97
The Red Sandstone Plain.																										
ayonne	*2.62	−1.27	3.55	−0.43	2.12	−1.88	2.71	−1.68	2.81	−1.15	2.83	−0.95	4.27	−0.34	3.20	−1.86	2.52	−1.01	1.49	−3.18	6.54	+3.27	2.55	−1.83	37.21	−12.31
oonton	2.49	−1.34	1.84	−2.13	2.50	−1.44	2.41	−1.58	2.44	−1.62	4.32	+0.65	3.00	−1.90	2.81	−2.27	2.82	−1.31	0.93	−2.98	4.67	+1.10	2.59	−1.39	32.82	−16.21
hatham	3.64	−0.05	2.90	−0.53	3.22	−0.52	3.23	−0.87	4.50	+1.00	5.47	+1.41	5.14	+0.70	4.40	−0.01	3.85	−0.44	1.29	−2.92	4.96	+2.06	3.82	−0.35	46.42	−0.52
lizabeth	2.64	−1.40	3.53	−0.64	2.70	−1.52	2.63	−1.05	2.50	−1.32	2.92	−0.70	4.05	−1.11	3.00	−1.29	4.14	+0.37	1.44	−2.45	4.82	+1.57	2.99	−0.97	37.36	−10.51
lemington	2.72	−0.97	2.66	−0.88	3.12	−0.77	2.39	−1.13	2.21	−1.81	3.82	−0.02	5.51	+0.29	2.50	−2.21	1.31	−2.59	2.12	−1.54	3.29	+0.17	3.08	−0.68	34.73	−12.14
ersey City	2.65	−0.85	3.54	−0.18	2.27	−1.88	2.29	−1.87	2.83	−0.75	2.68	−0.82	4.07	−0.37	3.30	−1.23	1.77	−1.58	1.77	−1.91	5.53	+2.34	2.65	−1.28	35.35	−10.38
ambertville	2.72	−0.93	3.22	−0.26	3.20	−0.83	3.43	−0.15	3.21	−0.81	3.86	−0.05	4.43	−0.39	3.13	−1.53	1.05	−2.84	2.45	−1.03	3.08	−0.13	2.85	−1.02	36.63	−9.97
ittle Falls	2.88	−0.82	2.28	−1.19	2.65	−0.94	3.25	−0.87	3.20	−0.59	5.04	+1.52	4.25	−0.14	5.43	+1.03	2.78	−0.80	1.29	−3.22	6.18	+3.28	3.06	−1.03	42.29	−3.77
ew Brunswick	2.65	−1.14	3.00	−0.62	2.31	−1.50	2.18	−1.56	2.54	−1.35	4.39	+0.63	4.08	−0.96	2.88	−2.27	1.43	−2.17	1.77	−1.81	3.27	−0.21	2.40	−1.27	32.90	−14.23
ew Milford	2.43	......	2.04	......	2.38	......	2.73	......	2.98	......	3.78	......	3.55	......	4.75	.....	2.33	......	1.48	......	5.70	......	2.61	......	36.76	....
aterson	2.95	−0.90	1.95	−2.26	2.49	−1.89	3.04	−0.52	3.05	−1.39	4.72	+0.60	2.98	−2.04	4.88	+0.15	2.40	−1.73	1.10	−2.99	6.45	+3.28	2.25	−1.81	38.26	−11.50
lainfield	2.69	−1.33	3.21	−0.75	3.10	−1.17	2.39	−1.51	2.60	−1.32	4.38	+0.64	5.65	−0.18	2.70	−2.51	4.96	+0.59	1.31	−2.84	4.44	+1.07	2.36	−1.70	39.79	−11.01
idgefield	2.46	......	2.61	......	2.35	......	2.58	......	2.77	......	2.65	......	3.62	......	4.40	......	2.24	......	1.80	......	4.68	......	2.49	......	34.65	....
omerville	2.55	−1.17	2.58	−1.20	2.65	−1.31	2.05	−1.44	2.11	−1.74	3.60	−0.14	5.47	+0.36	2.91	−1.93	1.28	−2.37	1.41	−2.03	4.06	+1.02	2.30	−1.55	32.97	−13.50
outh Orange	2.31	−1.72	2.13	−1.80	3.17	−0.69	2.71	−0.86	4.30	+0.74	3.67	+0.12	4.07	−0.94	3.48	−1.60	2.23	−1.58	1.46	−2.38	5.59	+2.29	3.20	−0.72	38.32	−9.88
erona	2.80	......	2.22	......	2.79	......	2.78	......	3.03	......	4.18	......	4.50	......	3.45	...	1.62	......	1.30	......	5.13	......	3.19	......	36.99	....
oodcliffe Lake	3.10	......	1.97	......	2.90	......	2.92	......	3.42	......	3.66	......	3.37	......	5.58	......	3.19	......	1.61	......	5.70	......	3.02	......	40.44	....
ew York, N. Y.	2.58	-1.08	3.40	−0.42	2.16	−1.48	2.01	−1.22	2.89	−0.35	2.60	−0.73	5.05	+0.81	3.43	−0.90	1.37	−2.02	1.76	−1.77	5.43	+2.47	2.65	−0.97	35.33	−7.66
The Southern Interior.																										
lleplain	3.82	+0.29	2.17	−1.42	2.05	−1.65	1.84	−1.81	2.51	−1.31	4.38	+1.16	1.85	−2.26	3.09	−1.21	1.05	−2.34	2.00	−1.42	2.22	−0.39	2.92	−1.03	29.90	−13.39
ridgeton	.....	......	.....	......	.....	......	2.27	−1.25	1.54	−2.30	3.12	−0.61	1.91	−2.58	2.31	−2.28	2.08	−1.23	1.98	−1.61	2.25	−0.55	1.58	−2.24	.....	....
urlington	3.10	−0.30	4.01	+0.51	3.03	−0.68	1.75	−1.95	2.96	−1.25	3.43	−0.45	4.01	−0.73	4.17	−1.28	1.87	−1.74	2.66	−0.99	3.36	+0.25	3.13	−1.19	37.48	−9.80
ayton	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	1.63	−1.70	2.48	−0.36	.....	......	.....	....
ammonton	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	3.70	+0.15	1.69	−1.63	2.62	−0.98	.....	....
ightstown	3.04	−0.23	3.51	−0.09	3.11	−0.93	2.20	−1.71	2.41	−1.54	4.59	+0.99	6.45	+1.46	3.37	−1.21	1.37	−1.76	2.02	−1.69	2.86	−0.45	2.29	−1.40	37.22	−8.56
dian Mills	3.64	−0.18	3.78	+0.33	2.35	−1.68	1.72	−1.71	3.54	+0.30	4.38	+0.25	2.84	−1.82	3.73	−2.20	1.74	−2.17	3.03	−0.41	2.07	−1.01	3.33	−1.07	36.15	−11.37
kewood	3.32	−0.36	4.19	+0.62	2.40	−1.58	2.35	−1.32	2.93	−0.47	3.90	+0.19	5.29	+0.44	2.55	−3.50	1.60	−1.19	2.53	−1.06	3.60	+1.14	2.59	−2.05	37.25	−19.14
oorestown	3.03	−0.13	3.80	+0.32	2.33	−1.43	1.43	−1.86	3.09	−0.93	6.48	+2.76	4.70	+0.02	2.78	−2.11	2.61	−1.02	2.24	−1.33	2.18	−1.07	2.27	−1.42	36.94	−8.50
orthfield	4.00	+0.47	1.96	−0.83	1.21	−2.28	1.99	−1.47	2.02	−1.45	4.19	+0.52	4.59	+0.99	2.18	−2.17	0.44	−2.06	2.23	−0.55	1.41	−0.97	2.39	−1.73	28.61	−11.53
emberton	2.81	......	3.59	......	1.95	......	1.52	......	2.61	......	5.99	......	4.02	......	3.42	......	1.40	......	1.73	......	1.69	......	2.54	......	33.27	....
easantville	4.03	+0.87	2.46	−0.35	1.77	−1.70	1.96	−1.39	2.03	−1.23	2.46	−1.47	4.37	+0.53	3.29	−1.64	0.67	−2.45	2.50	−0.94	1.87	−0.85	2.94	−1.30	30.35	−11.92
nyon	2.27	......	3.64	. .	2.68	......	1.90	......	2.38	......	3.81	......	4.66	......	2.91	......	1.60	......	2.26	.....	3.75	......	2.94	......	34.80	....
enton	2.73	−0.58	3.81	+0.54	2.66	−0.74	1.74	−1.20	1.99	−1.09	4.25	+1.16	3.94	0.00	3.30	−1.45	1.55	−1.85	2.08	−0.70	2.19	−0.54	2.38	−0.97	32.62	−7.42
enton No. 2	3.00	......	3.85	.....	2.98	......	1.97	......	2.20	......	4.15	......	4.27	......	3.31	...	1.78	.....	1.98	......	2.21	......	2.52	......	34.22	....
ckerton	3.17	−0.46	2.90	−0.76	1.91	−2.34	1.59	−2.15	2.93	−0.81	4.43	+0.60	4.33	+0.45	2.58	−2.96	2.78	−0.28	2.66	−0.87	2.62	−0.46	1.92	−2.59	33.82	−12.63
iladelphia, Pa.	3.15	−0.15	3.65	+0.33	2.58	−0.81	1.64	−1.41	3.25	−0.01	4.96	+1.72	4.06	−0.09	1.51	−3.11	2.57	−0.57	1.74	−1.07	2.36	−0.34	2.50	−0.93	33.97	−6.44
The Sea Coast.																										
bury Park	3.76	+0.19	5.13	+1.63	0.44	−3.79	0.50	−3.19	2.40	−1.18	2.69	−0.93	5.28	+0.74	2.92	−2.14	1.53	−1.46	2.46	−1.25	4.81	+1.89	3.00	−0.85	34.92	−10.34
lantic City	3.75	+0.26	2.07	−1.29	1.30	−2.30	2.00	−0.99	1.95	−1.10	5.04	+2.00	4.19	+0.26	2.55	−1.94	0.89	−1.76	2.43	−0.77	2.74	−0.08	2.27	−1.67	31.18	−9.38
pe May City	3.50	+0.13	1.07	−2.22	1.42	−2.31	1.54	−1.45	2.00	−0.99	3.20	+0.16	2.77	−1.01	1.92	−2.34	2.12	−0.88	2.46	−0.84	2.15	−1.07	1.97	−1.81	26.12	−14.63
ng Branch	3.45	−0.73	3.48	−0.43	3.31	−1.03	2.05	−2.50	2.34	−1.42	5.41	+1.61	6.08	+1.16	1.97	−4.16	1.59	−1.47	1.79	−2.26	4.13	+0.61	1.52	−3.22	37.12	−13.84
ndy Hook	2.81	−1.15	3.63	−0.12	1.68	−2.36	2.08	−1.54	1.83	−1.89	3.32	−0.46	3.94	−1.18	2.94	−2.04	3.33	−0.10	1.89	−1.89	4.10	+0.85	2.09	−1.95	33.64	−13.83

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* Interpolated from surrounding stations.

Monthly and Annual Mean Temperatures for the Year 1930, with Departures from the Normal

Stations.	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	28.4	+1.1	[a]34.0	+6.9	[a]40.3	+2.2	47.8	−2.0	63.0	+2.3	72.0	+3.2	[d]75.6	+2.4	[a]71.3	+0.3	[a]68.8	+4.1	53.4	−0.4	42.9	+1.8	31.4	+0.8	52.4	+1.9
Charlotteburg	28.6	+1.7	32.6	+7.0	37.4	+1.6	45.9	−0.9	[e]59.6	+2.1	69.4	+4.6	71.1	+1.1	68.6	+0.7	67.0	+5.1	50.2	−1.4	41.8	+1.7	30.6	+0.8	50.2	+2.0
Dover	[b]28.8	+2.2	[c]33.1	+6.9	[b]37.5	+2.3	46.2	−1.2	61.0	+2.4	[a]69.6	+2.9	72.2	+0.8	69.2	+0.1	[a]65.0	+2.8	[a]49.9	−1.4	41.0	+0.9	30.0	+0.1	50 3	+1.7
Layton	24.8	+0.1	31.0	+7.4	36.3	+0.7	44.6	−2.6	58.7	+0.7	68.1	+2.6	70.6	−0.3	[b]68.0	−0.4	65.4	+3.1	49.5	−2.0	40.5	+1.7	28.4	+1.0	48.8	+1.0
Long Valley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.0	.....	71.8	.....	68.4	.....	65.9	.....	49.4	.....	40.8	.....	[a]29.9	.....	.....	.....
Newton	28.0	+2.3	32.7	+6.2	37.4	+1.9	[a]46.4	−1.6	61.2	+1.7	69.8	+1.8	[a]73.5	+1.0	70.5	+0.1	67.4	+3.9	52.0	−0.7	42.2	+1.7	[a]30.7	+0.6	51.0	+1.6
Phillipsburg	29.6	+1.5	34.4	+6.5	40.0	+1.9	48.2	−1.7	63.0	+1.7	72.0	+2.7	74.4	+0.3	71.5	−0.3	68.7	+3.5	52.2	−1.7	42.6	+1.4	32.0	+0.7	52.4	+1.4
Sussex	[a]27.1	+0.5	[d]32.2	+6.8	[a]37.8	+1.5	[b]45.6	−3.0	[e]61.2	+1.3	[a]69.2	+2.4	[a]71.6	−0.5	69.2	−0.3	66.1	+1.9	.....	.....	41.6	+0.5	29.8	−0.1	.....	.....
The Red Sandstone Plain.																										
Bayonne	.....	.....	36.9	+7.5	[a]40.6	+1.1	46.6	−2.9	[a]63.3	+3.0	70.9	+2.5	75.0	+1.0	73.0	+0.8	72.9	+6.5	56.8	+0.6	47.2	+3.5	35.8	+2.8	.....	.....
Boonton	28.0	.....	30.6	.....	36.5	.....	45.4	.....	60.0	.....	69.4	.....	72.2	.....	69.0	.....	66.0	.....	49.8	.....	40.8	.....	.....	.....	.....	.....
Elizabeth	32.6	+2.4	[a]36.0	+5.5	40.8	+2.0	49.6	−1.2	63.8	+1.8	72.8	+2.3	75.7	+0.4	72.4	−1.0	71.2	+4.5	52.7	−2.7	45.0	+1.5	34.8	+1.5	54.0	+1.4
Flemington	30.3	+0.5	35.4	+6.6	41.4	+1.3	48.9	−1.5	63.7	+2.4	72.4	+3.2	75.2	+0.6	72.0	−0.5	70.6	+4.3	53.8	−2.2	44.2	+1.3	33.5	+1.5	53.4	+1.5
Jersey City	33.8	+1.6	37.1	+6.5	40.3	+1.1	48.4	−1.6	63.8	+2.2	73.0	+2.1	76.2	+0.1	74.0	−0.1	71.5	+4.3	55.5	−0.8	45.5	+1.5	35.2	+1.1	54.5	+1.5
Lambertville	30.1	.....	35.0	.....	39.6	.....	46 8	.....	62.2	.....	71.6	.....	74.2	.....	71.4	.....	68.9	.....	52.4	.....	42.7	.....	32.0	.....	52.2	.....
Little Falls	30.0	+2.0	34.0	+4.4	38.9	+0.9	47.7	−2.2	62.2	+2.5	71.8	+3.8	74.2	+0.4	71.6	−1.6	69.2	+5.1	52.4	−2.5	43.6	+1.4	33.4	+1.9	52.4	+1.3
New Brunswick	31.8	+1.6	36.2	+5.4	40.5	+1.7	48.2	−1.4	63.6	+3.2	72.0	+2.9	75.2	+1.2	71.8	−0.3	70.4	+4.8	52.6	−2.2	44.2	+0.8	33.8	+0.6	53.4	+1.5
Paterson	32.3	+2.7	36.8	+6.6	41.0	+2.2	49.8	−0.7	64.6	+3.1	73.2	+3.4	75.3	+0.9	[a]71.6	−0.6	68.5	+2.3	.....	.....	45.8	+2.3	34.4	+1.3	.....	.....
Plainfield	31.3	+1.3	34.5	+5.8	38 8	0.0	47.5	−2.1	62.2	+2.0	71.0	+2.4	74.0	0.0	70.8	−1.0	69.2	+3.6	52.7	− 1.5	43.1	+0.6	33.8	+1.1	52.4	+1.0
Ridgefield	30.0	.....	34.0	.....	37.9	.....	47.5	.....	61.8	.....	72.0	.....	74.2	.....	71.3	.....	69.4	.....	52.6	.....	42.9	.....	32.0	.....	52.1	.....
Somerville	30.4	+1.6	.....	.....	[e]40.6	+2.4	47.4	−2.1	62.1	+1.3	71.4	+2.3	74.6	+0.5	[a]71.4	−1.0	69.0	+3.0	51 8	--2.5	43.8	+1.4	33.2	+1.0	.....	.....
South Orange	31.4	+2.5	35.8	+6.8	39.4	+2.3	47.8	−0.7	[b]62.8	+2.8	70.7	+2.2	74.0	+0.8	[b]70.5	−0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Verona	29.4	.....	33.7	.....	37.8	.....	46.0	.....	60.6	.....	70.2	.....	72.1	.....	70.4	.....	67.3	.....	51.9	.....	42.0	.....	31.5	.....	51.1	.....
New York, N. Y	33.6	+2.7	37.0	+5.7	39.8	+2.1	47.6	−1.8	62.6	+2.0	71.8	+3.0	75.0	+1.2	72.8	−0.3	71.2	+4.4	55.0	−1.3	45.8	+1.6	35.0	0.0	53.9	+1.6
The Southern Interior.																										
Belleplain	[a]35.1	+2.1	[a]38.2	+6.7	[a]41.4	+0.3	[a]48.0	−2.6	62.2	+1.1	70.6	+1.9	74.8	+1.0	70.4	−2.2	[a]69.6	+3.1	50.8	−5.5	44.4	−0.1	32.5	−2 6	53.2	+0.3
Bridgeton	.....	.....	.....	.....	.....	.....	49.8	−2.9	65.2	+1.2	73.8	+1.7	77.2	+0.5	74.2	−0.8	72.4	+4.2	54.4	−3.0	45.5	−0.1	33.5	−2.7	.....	.....
Burlington	34.4	+2.1	37.9	+6.6	43.2	+2.8	49.6	−2.2	65.7	+3.8	73.0	+3.3	76.5	+1.5	73.0	−1.2	71.7	+4.9	54.0	−4.2	46.0	+1.6	34.8	+1.0	55.0	+1.7
Clayton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54.6	−2.2	45.6	+1.3	.....	.....	.....	.....
Hammonton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53.5	.....	45.8	.....	34.0	.....	.....	.....
Hightstown	32.5	+2.6	36.2	+6.8	41.0	+0.6	47.9	−2.6	[c]63.6	+2.3	71.6	+2.6	74.6	+0.2	70.6	−1.7	70.0	+3.2	51.8	−3.4	44.1	+0.8	33.5	+0.9	53.1	+1.0
Indian Mills	34.6	+2.7	37.6	+5.8	41.4	+0.9	48.6	−1.7	63.6	+1.5	72.0	+2.2	75.1	+0.4	71.4	−1.2	71.0	+4.9	52.7	−2.8	45.4	+2.5	33 6	−0.2	53.9	+1.2
Lakewood	34.1	+2.8	36.8	+7.1	40.3	+0.7	47.7	−1.7	63.8	+3.6	70.9	+3.4	74.2	+1.4	70.0	−1.1	68.8	+4.2	51.6	−3.5	44.2	+1.4	34.2	+0.7	53.0	+1.6
Moorestown	32.0	+1.3	36.6	+5.3	41.0	+1.8	48.4	−2.0	63.6	+2.3	72.0	+2.0	74.9	+0.2	71.5	−1.1	70.0	+4.0	53.0	−1.7	44.2	+1.0	32.8	−0.7	53.3	+1.0
Pemberton	34.2	.....	37.4	.....	42.4	.....	49.4	.....	64.2	.....	72.4	.....	76.0	.....	72.2	.....	70.8	... .	53.4	.....	45.8	.....	34.2	.....	54.4	.....
Pleasantville	[a]34.8	.....	36.2	.....	[a]39.6	.....	45.4	.....	61.9	.....	69.2	.....	74.0	.....	70.2	.....	69.3	.....	51.6	.....	[a]44.8	.....	32.4	.....	52.4	.....
Runyon	.....	.....	.....	.....	.....	.....	[a]47.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49.7	.....	42.0	.....	32.3	.....	.....	.....
Trenton	33.0	+2.5	37.6	+6.9	41.0	+1.9	48.4	−1.4	63.4	+2.3	73.0	+3.5	75.6	+1.1	72.8	−0.2	70.8	+3.9	54.0	−1.6	44.8	+0.4	33.7	−0.7	54.0	+1.6
Tuckerton	35.6	+3.0	39.0	+8.2	41.4	+1.4	47.6	−1.7	62.4	+2.5	70.0	+1.6	74.1	0.0	70.0	−2.7	69.6	+3.4	54.0	−2.1	47.0	+2.9	35.8	+1.4	53.9	+1.5
Philadelphia, Pa	35.6	+3.0	40.1	+6.2	43.7	+2.9	51.2	−0.9	66.4	+3.5	75.2	+3.8	78.0	+1.8	75.7	+0.9	74.1	+6.1	56.7	−1.1	47.6	+1.9	36.6	+0.3	56.7	+2.3
The Sea Coast.																										
Asbury Park	33.8	+1.6	37.7	+6.3	39.9	+0.9	47.3	−1.2	63.0	+4.2	68.1	+0.7	74.4	+2.0	[e]71.0	−0.8	69.6	+2.8	[e]52.4	−3.4	.....	.....	... .	.....	.....	.....
Atlantic City	36.4	+3.9	39.4	+5.8	41.8	+3.2	47.8	0.0	62.8	+4.7	69.7	+3.1	74.6	+2.5	72.2	−0.3	72.3	+5.5	54.7	−2.2	47.5	+1.9	36.4	0.0	54.6	+2.8
Cape May City	36.5	+2.4	39.2	+5.1	42.6	+1.8	48.9	+0.5	63.8	+5.2	69.6	+1.9	74.8	+1.4	72.0	−1.4	72.6	+3.6	55.2	−4.4	48.3	+0.9	36.6	−1.4	55.0	+1.8
Long Branch	32.8	+1.2	34.9	+1.5	40.0	+1.5	45.6	−2.5	63.4	+5.2	71.2	+3.5	74.8	+2.7	70.2	−0.8	68.6	+2.7	51.8	−4.5	43.4	+0.8	32.1	−2.0	52.4	+1.0
Sandy Hook	33.0	+2.2	35.8	+5.2	39.4	+2.4	46.9	−0.1	62.0	+3.5	71.0	+3.2	74.6	+0.9	72.6	−0.2	71.2	+4.1	55.4	−1.6	45.0	+0.4	34.9	+0.5	53.5	+1.7

Reference letters, as a, b, c, in table indicate number of days missing; for example, b represents 2 days.

THE WEATHER BY MONTHS.

JANUARY: The first half was warm and the second half cold, but the average was above normal. Abnormally cloudy, but the precipitation was below normal. FEBRUARY: An unusual range in temperature was experienced from below zero on the 16-17th to eighty a week later. Precipitation deficient. MARCH: No marked characteristics. There was practically no snow and about one-third of the month was favorable to the germination and growth of plant life. Precipitation very deficient. APRIL: Very dry with an absence of the customary high temperatures of Spring; higher temperatures were previously recorded in both February and March. MAY: Continued dry, with excessively warm during the first decade and the month one of the warmest Mays on record. JUNE: Some relief from the drought; precipitation slightly above normal. Continued warm, except the second week. JULY: The first half was showery and cool, second half warm and dry. Considerable damage by wind. AUGUST: Some let-up in the heat wave, but the drought continued, especially in the south portion. SEPTEMBER: The average temperature was the third highest on record for September. Drought continued. OCTOBER: Generally cool with the first killing frosts occurring at about normal dates. Continued dry with streams and wells exceptionally low. NOVEMBER: Nearly normal conditions prevailed. Light snow fell at most stations. DECEMBER: The drought conditions resumed with precipitation only two-thirds of normal. Snowfall about normal but the ground was bare nearly all of the time.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVI. JANUARY, 1931. No. 1

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The new year opened with mostly clear and moderately cold weather. By the 3d the temperature had risen above the normal and from that date on relatively mild weather prevailed to the end, except for the short periods on the 15-16th and the 22d. The lowest temperatures were recorded mostly on the 15th and 16th and were near or below zero in the Highlands and from zero to fifteen above over the remainder of the State. The monthly maxima were in the fifties and low sixties and were recorded on the 27th.

There was a slow increase in general cloudiness as the month progressed, but the precipitation continued deficient. The average for the State was the least of any January since 1916, and amounted to about 60% of the normal, or approximately the same relative degree of drought that has prevailed for about a year. Dates of general precipitation, nearly all of which was rain, were the 5-6th, 12-13th, and 19th. The snowfall was less than in any January during the past 36 years, except for the years 1913 and 1924.

The average number of clear days is the greatest on record for January (41 years), and the number of cloudy and rainy days correspondingly the least.

Summed up as a whole, it was a fair and mild month with no damaging storms reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 41 stations, was 31.6°, which was 1.8° above normal. The highest temperature was 64° at Tuckerton on the 27th, and the lowest, 5° below zero, at Layton on the 2d and 16th. The greatest daily range of temperature was 45° at Lay- on on the 2d. The highest monthly mean temperature was 36.7° at Cape May City, and the lowest, 26.0° at Sussex.

The temperature departure from the normal for the year 1931 o date, by sections, is: The Highlands, +1.2°; Red Sandstone Plain, +2.3°; Southern Interior, +1.5°; Sea Coast, +2.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from ob- ervations of 48 stations, was 2.16 inches, which was 1.46 inches below normal. The average total snowfall at 20 selected sta- ions was 1.6 inches. The greatest monthly precipitation was .35 inches, at Bayonne, and the least, 1.37 inches at Newton. The greatest amount of precipitation in any 24 consecutive hours was 1.92 inches at Bayonne on the 5-6th.

The precipitation accumulated departure from the normal for he year 1931, to date, by sections, is: The Highlands, —1.69 nches; Red Sandstone Plain, —1.42 inches; Southern Interior, —1.38 inches; Sea Coast, —1.45 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 44 miles per hour from the northwest at Sandy Hook on the 6th, and from the east at Atlantic City on the 5th.

MISCELLANEOUS.

The per cent of possible sunshine was 57, or 7 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.00 inches, or 0.11 inch below normal. The highest reading was 30.50 inches on the 15th at Trenton, and the lowest was 28.92 inches on the 6th at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 1.4 feet, and the highest 2.4 feet on the 7th and 8th. The mean stage at Trenton was not ascertained as the river was frozen during most of the month.

Dense fog occurred on the following dates: 5, 6, 12, 19 and 25. Sleet was reported on the 12th from scattered points in the southern half of the State; on the 19th it was quite general throughout the northern part. An aurora was observed at Hammonton on the 8th.

COMPARATIVE DATA FOR JANUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	30.8	67	0	4.08	5.41	3.33	......	......	......	......	......
1886	27.3	60	−10	4.47	5.59	3.08	......	......	......	......	......
1887	28.4	67	−6	3.86	6.65	2.00	......	......	......	12	10
1888	25.4	59	−12	4.77	6.74	2.80	......	......	......	12	9
1889	36.2	60	8	5.68	8.78	3.84	......	......	......	9	9
1890	**41.3**	**78**	**12**	2.29	3.22	1.05	......	......	......	11	10
1891	34.2	59	10	**6.57**	**10.55**	**4.41**	......	10	11	10	10
1892	29.9	67	−6	5.13	7.05	2.50	......	10	9	12	10
1893	21.6	*54*	−21	3.04	4.56	1.87	......	10	10	11	9
1894	34.2	61	−4	2.34	3.80	1.18	......	10	8	13	11
1895	28.1	64	−4	4.66	5.80	2.48	9.7	10	10	11	11
1896	28.6	61	--7	1.66	*2.81*	*0.68*	......	12	10	9	5
1897	29.0	64	−6	2.80	4.21	1.70	11.5	11	8	12	9
1898	32.6	64	−10	4.20	5.90	2.79	9.7	9	11	11	11
1899	30.1	60	−21	4.01	5.73	2.40	6.0	13	8	10	11
1900	32.4	64	−5	3.85	5.50	2.37	2.6	11	11	9	10
1901	30.4	63	−6	2.52	4.00	1.35	5.4	11	11	9	9
1902	28.4	58	−5	3.28	4.35	2.52	8.6	12	9	10	10
1903	30.4	57	−5	3.90	5.04	2.31	6.4	10	10	11	10
1904	23.3	58	*−34*	3.09	4.67	1.34	15.6	13	7	11	10
1905	27.0	60	−16	4.18	7.13	2.68	21.3	12	9	10	9
1906	36.5	74	−5	2.85	3.86	2.08	3.1	11	9	11	11
1907	31.8	71	−19	3.50	5.80	1.93	10.3	8	9	14	14
1908	31.8	60	−6	3.74	5.22	2.29	9.9	12	11	8	9
1909	33.2	69	−12	3.18	4.13	2.18	7.5	8	9	14	12
1910	29.7	*54*	−15	5.04	6.65	3.66	13.3	8	8	15	15
1911	33.5	63	0	3.44	5.34	1.97	3.6	10	7	14	14
1912	22.3	58	−32	2.82	4.62	1.73	13.4	8	12	11	13
1913	35.9	68	10	3.58	4.71	2.63	*0.8*	11	7	13	14
1914	31.9	73	−12	3.85	6.15	1.95	2.4	9	8	14	9
1915	33.5	61	3	6.55	8.92	4.40	3.4	11	6	14	12
1916	35.1	74	−2	*1.50*	2.96	0.92	1.9	11	8	12	11
1917	31.4	58	0	3.26	4.52	2.35	5.4	10	8	13	13
1918	*20.3*	56	−16	4.14	6.14	2.78	18.9	12	8	11	11
1919	34.1	62	−7	3.51	4.44	2.24	1.3	14	7	10	8
1920	23.6	53	−10	2.60	3.53	1.61	6.6	11	7	13	11
1921	33.0	63	−5	2.63	3.49	1.78	2.7	13	8	10	9
1922	27.6	57	−11	2.62	4.13	1.08	11.1	15	6	10	8
1923	30.1	66	−14	5.22	7.26	3.41	16.6	9	7	15	12
1924	32.2	65	−6	4.48	5.69	2.88	1.4	15	8	8	8
1925	27.4	59	−20	4.43	8.73	2.54	**22.8**	12	6	13	10
1926	30.8	63	−9	2.61	4.04	1.63	2.4	11	8	12	9
1927	29.2	70	−12	2.22	3 32	1.19	7.9	11	7	13	11
1928	32.5	65	−15	2.26	3.97	1.37	8.3	15	8	8	8
1929	30.7	67	−4	3.49	5.03	1.92	1.6	13	7	11	10
1930	31.7	72	−14	2.92	4.03	1.80	5.9	10	6	15	10
1931	31.6	64	−5	2.16	4.35	1.37	1.6	16	7	8	5

W. B. O.Philadelphia-3-3-31-830.

Climatological Data for January, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	29.2^{a}	+1.9	52^{a}	28	9^{a}	16†	31^{a}	1.68	−1.86	0.94	4.0	4	22	3	6	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	28.4	+1.5	52	4†	1	23	39	2.35	−1.30	1.02	6.7	7	21	1	9	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	......	......	−1	15	....	2.21	−0.78	0.78	9.9	8	18	2	11	nw.	Brice E. Riker.
Dover	Morris	600	47	28.0^{b}	+1.4	53^{b}	27	7	15	32^{b}	2.07	−2.32	0.82	4.5	4	10	15	6	......	William C. Harris
Layton	Sussex	480	30	24.8	+0.1	54	27	−5	2†	45	1.85	−1.04	0.68	6.6	5	14	6	11	nw.	A. M. Depue.
Long Valley	Morris	520	1	28.0	....	51	27	6	15†	30	1.73	....	0.61	5.0	4	18	11	2	nw.	S. N .Dilts.
Newton	Sussex	769	47	27.8	+2.1	52	26	4	16	30	1.37	−2.24	0.69	8.1	5	14	8	9	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	30.1	+2.0	52	27	14	14†	27	1.85	−1.75	0.64	1.0	4	21	3	7	......	Town Engineer.
Sussex	Sussex	442	36	26.0^{a}	−0.6	47^{a}	27	−1^{a}	16	32^{a}	1.44	−2.04	0.58	3.9	6	16	2	13	n.	A. J. W. Mowatt
Means and extremes	......	......	....	27.8	+1.2	54	27	−5	2†	45	1.83	−1.69	1.02	5.5	5	17	6	8	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	34.5	+3.8	57	27	10	15	21	4.35	+0.46	1.92	1.5	4	16	5	10	w.	William Mann.
Boonton	Morris	400	§41	......	......	....	......	7	23	....	2.02	−1.81	0.96	......	5	13	3	15	sw.	John Kline.
Canoe Brook	Essex	173	1	27.8	....	54	27	7	2†	35	2.08	....	0.89	......	5	18	8	5	w.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	....	......	......	......	....	2.57	−1.12	0.96	1.6	7	17	6	8	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	32.6^{a}	+2.4	57	27	11	9	32	2.59	−1.45	0.90	1.6	6	23	4	4	nw.	Union County Park Com.
Flemington	Hunterdon	140	§45	32.0	+2.2	58	4†	10	23	35	1.87	−1.87	0.67	3.0	4	23	1	7	nw.	Hiram E. Deats.
Jersey City	Hudson	10	33	33.3	+1.1	56	27	11	15	22	2.45	−1.05	0.90	0.8	6	12	12	7	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	44	30.1	....	55	27	10	16	26	1.96	−1.69	0.63	2.5	5	18	6	7	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	30.4	+2.4	58	27	9	15	36	2.25	−1.45	0.98	2.3	8	18	7	6	uw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	78	32.2	+2.0	57	27	12	15†	31	2.24	−1.55	0.73	1.7	6	22	3	6	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	1.83	....	0.63	......	5	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	32.8	+3.2	57	27	11	15	29	2.40	−1.45	0.90	3.0	8	18	8	5	sw.	Vincent A. Messineo.
Plainfield	Union	120	43	31.6	+1.6	57	27	10	2†	34	2.16	−1.86	0.65	1.9	7	9	14	8	nw.	S. K. Pearson.
Ridgefield	Bergen	80	14	29.9	....	57	27	9	15	29	1.91	....	0.65	0.9	6	13	9	9	nw	George P. Kirsten.
Somerville, near	Somerset	70	48	31.4	+2.6	59	27	10	23	38	1.91	−1.81	0.67	1.5	4	14	7	10	nw.	Julius Gerlich.
South Orange	Essex	200	59	31.0^{c}	+2.1	58^{c}	27	10^{c}	15†	35^{c}	2.21	−1.82	0.85	1.2	5	16	3	12	w.	Everett W. Bird.
Verona	Essex	490	5	29.4	....	54	27	8	15	24	2.42	....	1.05	4.3	6	12	11	8	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	2.12	....	0.78	......	5	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	61	33.2	+2.3	55	27	11	15	23	2.43	−1.23	0.92	0.7	6	9	14	8	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	31.4	+2.3	59	27	7	2†	38	2.30	−1.42	1.92	2.0	6	16	7	8	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	32.8	−0.2	57	4†	5	16	38	2.03	−1.50	0.81	T.	5	9	7	15	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	48	33.8	+0.1	60	27	14	14	27	2.00	−1.52	0.73	0	5	20	5	6	sw.	Bennett K. Matlack
Burlington	Burlington	12	§45	35.4	+3.1	56	27	15	15†	25	2.68	−0.72	0.83	0.3	5	14	7	10	nw.	Public Service Power Co.
Clayton	Gloucester	134	31	33.2	+1.1	60	27	12	16	28	....	....	......	T.	5	14	12	5	nw.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§25	34.2	....	63	4	12	16	32	2.15	−1.64	0.80	T.	5	20	3	8	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	31.4	+1.5	57	27	11	23	32	2.22	−1.05	0.78	T.	4	23	2	6	nw.	Charles Welsh.
Imlaystown	Monmouth	115	38	32.0^{c}	+0.9	57^{c}	27	9^{c}	15	24^{c}	2.05	−1.49	0.72	T.	6	14	10	7	nw.	Carlton Lawrence.
Indian Mills‡‡	Burlington	76	42	33.0	+1.1	60	27	9	8†	35	2.29	−1.53	0.81	T.	6	12	12	7	nw.	James M. Armstrong.
Lakewood	Ocean	54	27	32.6	+1.3	59	27	10	23	34	1.99	−1.69	0.90	T.	5	15	6	10	nw.	R. W. Holman.
Moorestown	Burlington	......	68	32.4	+1.7	55	4†	13	15	26	2.11	−1.35	0.86	T.	5	13	5	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	1.96	−1.57	0.85	0	5	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	33.0	....	56	27	14	23	28	1.85	....	0.70	0	5	19	5	7	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	33.2	....	63	27	10	16	34	2.29	−0.87	1.05	......	5	17	7	7	nw.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	30.2	....	59	27	4	9†	42	2.34	....	0.81	......	4	26	2	3	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	33.2	+2 7	60	27	14	15	28	2.15	−1.16	0.89	T.	4	11	11	9	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	......	......	......	......	....	2.42	....	1.05	0.3	6	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	85.6	+3.0	64	27	10	16	30	1.80	−1.83	0.80	0	5	17	3	11	nw.	John H. Brown.
Philadelphia, Pa	......	117	60	36.2	+3.6	56	27	16	15	19	2.17	−1.13	0.89	0.1	4	11	8	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	33.1	+1.5	64	27	4	9†	42	2.15	−1.38	1.05	T.	5	16	7	8	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	......	......	......	......	......	......	....	2.28	−1.29	0.90	T.	5	20	7	4	nw.	Information Bureau.
Atlantic City	Atlantic	16	58	36.1	+3.6	54	27	16	16	24	2.06	−1.43	1.00	0	4	13	7	11	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	47	36.7	+2.6	59	27	18	15	20	1.71	−1.66	0.94	T.	5	15	7	9	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	31.9	+0.3	55	4†	12	15†	28	3.01	−1.17	1.30	0.2	6	13	10	8	nw.	William D. Martin.
Sandy Hook	Monmouth	22	33	32.9	+2.1	52	27	14	15	19	2.27	−1.69	0.86	0.6	5	18	6	7	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	34.4	+2.2	59	27	12	15†	28	2.27	−1.45	1.30	0.2	5	16	7	8	nw.	
For the State	......	......	....	31.6	+1.8	64	27	−5	2†	45	2.16	−1.46	2.92	1.6	5	16	7	8	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for January, 1931

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
elvidere	Delaware	T.				.32	.02						.40							.94					T.					T.			1.68
harlotteburg	Passaic					.07	.95						.43	.03						.72					.02					.03			2.25
ulvers Lake	Delaware	T.				.04	.78				T.		.45	T.						.87	.01	.03			T.					.02	.01	T.	2.21
over	Passaic					.82	.18						.48							.59													2.07
ayton	Delaware					.23	.68						.26							.65										.03	T.		1.85
ong Valley	Morris	T.				.21	.61						.32							.59					T.								1.73
ewton	Delaware						.36						.26	T.						.69		T.			.03		T.			.03	T.	T.	1.37
hillipsburg	...do					.49	.46						.26							.64					T.							T.	1.85
ussex	Hudson					.14	.58						.26							.37		.05								.04	T.		1.44
The Red Sandstone Plain.																																	
ayonne	Coast					*	1.92						1.40							.88		T.			.15					T.			4.35
oonton ‖‖	Passaic						.96	T.					.05	.54						.08	.39				T.					T.			2.02
anoe Brook	Essex					.89	T.						.04	.55						.30	.30	T.			T.	T.				T			2.08
hatham ‖	...do						.96	.12					.07	.61						.32	.43					.06				T.			2.57
lizabeth	Coast					.18	.90						.70	.03						.73					.05								2.59
lemington	Raritan					.18	.60						.42							.67					T.							T.	1.87
rsey City	Coast					.35	.49						.67							.90		T.			.03	T.				.01	T.		2.45
ambertville	Delaware					.30	.52						.48	.03						.63		T.			T.					T.	T.		1.96
ittle Falls. ‖‖	Passaic						.98	.01					.08	.52						.41	.22	.01								.02			2.25
ew Brunswick	Raritan	T.				.17	.73						.47	.12						.72		T.			.03				T.				2.24
ew Milford.**	Hackensack					.63	.12						.63							.15	.30												1.83
aterson	Passaic					.25	.90						.50							.69		.01			.02					.01	.02		2.40
ainfield	Raritan	T.				.59	.47						*	.65						.40		T.			.03					.02	T.		2.16
idgefield**	Hackensack					*	.62						.65							.60					.03					.01	T.		1.91
omerville	Raritan					.18	.67						.50	T.						.56					T.								1.91
outh Orange	Rahway					*	.85						.66	T.						.68					.02					T.			2.21
erona**	Passaic					.98	.07						.64							.70	T.				.02					.01	T.		2.42
oodcliff Lake**	Hackensack					.78							.60							.30	.41									.03			2.12
ew York, N. Y***	Coast					.82	.02						.63							.92	T.	T.			.03	T.				.01	T		2.43
The Southern Interior.																																	
elleplain	Tuckahoe					.35	.22						.81	.10						.55												T.	2.03
ridgeton	Coast					.57	.07					.06	.73							.57													2 00
rlington	Delaware					.40	.83						.57	.06						.82											T		2.68
ayton	Delaware					.44	.06						.14							.03	.01							T.		T.			0.68
ammonton	Mullica					.26	.31						.80	.04						.74								T.	T.				2.15
ightstown	Raritan					.26	.56						.62							.78													2.22
nlaystown	Monmouth					.14	.48						.60	.10						.72	.01												2.05
dian Mills	Mullica					.22	.36						.81	.10						.75								T.	.05				2.29
kewood	Metedeconk					.35	.50						.17	.07						.90													1.99
oorestown ‖‖	Delaware						.86	.02					T.	.49						.67	.07												2.11
rthfield	Coast					.55	.15						.85	.05						.36													1.96
mberton						.29	.20						.63	.03						.70													1.85
easantville ‖‖	Coast						.75	.02					T.	1 05						.43	.04												2.29
nyon	Coast					.10	.78						.65							.81													2.34
enton***	Delaware					.86	.04						.55							.70	T	T.									T.	T.	2.15
enton No. 2 ‖‖	Delaware						1.05	.04					.02	.53						.44	.34	T.										T.	2.42
ckerton	Coast					.52	.09						.80	.06						.33													1.80
ila., Pa***	Delaware					.88	.02						.54							.73	T.									T.	T.		2.17
The Sea Coast.																																	
bury Park	Coast					.31	.15						.90	.02						.90					T.								2.28
lantic City***	...do					.63	.06						1.00							.37								T.					2.06
pe May City	...do					.43	.07						.90	.04						.22	.05										T		1.71
ng Branch**	...do					.83	.06						.78							1.30		T.			.01					.03	T.		3.01
ndy Hook***	...do					.61	.01						73							.86		T.			.06			T.			T.		2.27

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ ‖ Precipition measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
antic City	30.02	30.48	15	29.00	6	15.0	44	e.	5	74	65	68	55
ng Branch	30.01	30.46	15	28.92	6					70	63	66	
orestown										76	59	67	
w York, N. Y	30.00	30.44	15	28.96	6	15.8	51	nw.	6	68	60	60	64
iladelphia, Pa	30.04	30.51	15	29.01	6	12.0	40	nw.	7	60	51	55	62
lgefield	30.00	30.44	15	28.98	6								
ndy Hook	29.99	30.43	15	28.94	6	13.9	44	nw.	6	76	64	69	58
enton	30.02	30.50	15	28.96	6	9.3	35	nw.	7	72	60	60	59
rona													

Daily Temperatures for January, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	29	35	42	49	49	49	39	32	33	41	44	36	36	33	30	31	35	44	36	39	34	26	34	36	33	48	....	52	41	40	37	38.
	Minimum	12	18	11	31	26	31	27	16	12	28	22	26	22	10	12	9	15	28	28	32	22	12	9	24	16	27	....	26	22	17	19	20.
Charlotteburg	Maximum	29	35	50	52	49	38	29	30	41	38	39	39	36	34	30	32	39	39	39	37	35	25	35	35	28	45	52	51	41	41	32	37.
	Minimum	23	8	11	34	22	29	22	15	12	26	27	20	25	14	7	9	21	31	20	30	20	10	1	20	13	28	15	20	18	14	17	18.
Dover	Maximum	30	35	48	49	40	39	30	31	40	40	42	34	31	34	25	32	40	42	35	38	32	....	37	33	34	46	53	44	43	32	....	37.
	Minimum	18	11	17	22	26	22	19	16	12	25	23	23	24	13	7	9	17	22	22	28	17	11	8	20	17	29	21	25	22	15	13	13.
Layton	Maximum	27	40	39	53	38	38	29	34	32	40	42	35	36	35	25	23	41	44	33	38	29	25	37	32	28	46	54	40	42	33	29	36.
	Minimum	14	−5	6	22	21	26	18	14	2	24	16	18	15	−1	7	−5	10	20	20	27	12	7	−3	19	12	24	15	21	16	13	12	18.
Long Valley	Maximum	30	33	41	42	39	40	31	31	37	39	40	35	35	31	28	29	39	40	35	37	38	26	35	34	30	44	51	49	41	40	37	36.
	Minimum	22	10	11	21	25	29	24	15	10	29	22	25	23	12	6	7	19	24	22	22	21	11	6	24	19	27	21	34	24	16	20	19.
Newton	Maximum	38	34	43	50	42	40	31	33	42	41	43	37	37	38	26	31	42	45	35	37	32	25	35	32	30	52	51	47	41	34	31	37.
	Minimum	17	6	20	32	24	24	17	12	12	26	24	27	24	12	5	4	19	28	24	28	15	9	6	7	9	26	25	25	19	12	15	17.
Phillipsburg	Maximum	30	36	41	48	40	40	34	33	35	42	42	35	37	33	24	30	40	40	36	40	35	24	38	33	34	47	52	41	42	33	39	37.
	Minimum	21	17	15	29	30	32	27	19	16	29	23	29	24	14	14	14	23	26	33	32	21	15	14	27	21	27	25	29	28	20	19	23.
Sussex	Maximum	28	32	39	46	40	38	38	31	31	38	....	38	35	34	25	29	39	39	34	39	37	25	34	34	30	42	47	43	41	39	32	35.
	Minimum	14	5	13	23	21	28	21	15	7	26	....	17	17	3	7	−1	14	32	20	29	21	8	2	21	10	22	15	30	12	15	17	16.
The Red Sandstone Plain.																																	
Bayonne	Maximum	36	37	44	54	47	45	33	38	38	42	46	42	43	37	25	36	42	45	43	44	43	30	38	37	38	52	57	49	48	36	35	41.
	Minimum	24	22	25	40	41	24	21	20	22	34	34	34	33	24	10	17	24	36	35	35	24	17	20	20	21	37	38	36	34	22	20	27.
Boonton§§	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	19	10	13	17	25	28	24	16	10	12	31	23	25	10	9	9	10	27	23	29	24	12	7	13	17	19	20	27	22	17	18	18.
Canoe Brook	Maximum	32	32	44	50	40	38	30	34	41	41	42	34	38	36	24	33	42	45	37	39	30	25	38	29	39	47	54	41	45	34	29	37.
	Minimum	18	7	11	18	22	26	25	17	10	17	17	23	23	9	10	8	14	27	23	31	26	14	7	17	18	20	19	27	21	17	20	18.
Elizabeth	Maximum	34	38	46	54	43	44	36	36	43	44	45	42	41	35	32	34	46	39	37	43	42	32	42	....	43	52	57	49	46	46	36	41.
	Minimum	23	14	18	34	28	32	26	16	11	25	24	27	29	18	12	13	22	29	29	31	28	16	14	....	21	29	25	34	28	19	24	23.
Flemington	Maximum	35	42	46	58	49	41	37	40	45	45	48	43	42	41	29	35	46	47	41	42	36	30	38	36	34	53	58	47	45	40	38	42.
	Minimum	19	14	14	33	29	31	27	17	13	28	24	25	25	14	11	11	22	22	27	30	23	14	10	24	22	28	23	34	25	18	22	21.
Jersey City	Maximum	35	36	44	52	47	45	33	36	41	42	45	41	42	36	26	35	45	44	40	43	36	27	37	35	37	50	56	48	45	38	38	40.
	Minimum	26	19	26	36	39	30	22	20	22	30	32	33	30	24	11	15	25	34	35	32	25	16	17	22	21	33	34	33	28	20	20	26.
Lambertville	Maximum	29	37	44	49	42	40	32	32	39	41	42	37	35	30	25	28	40	40	37	39	35	24	37	32	35	47	55	46	43	32	38	37.
	Minimum	23	14	21	35	30	30	23	14	15	28	27	21	28	18	11	10	23	26	30	30	21	13	11	26	21	30	31	27	27	18	21	22.
Little Falls§§	Maximum	34	39	50	54	41	40	32	36	43	45	36	43	40	37	27	35	44	47	38	42	32	28	39	29	42	50	58	43	45	33	31	39.
	Minimum	21	13	16	27	26	35	25	19	13	24	21	28	21	17	9	11	17	29	25	33	28	14	11	21	17	20	22	29	22	18	21	21.
New Brunswick	Maximum	34	40	47	53	47	44	35	35	41	41	44	40	38	34	30	32	43	43	39	41	38	29	38	37	35	49	57	53	45	42	39	40.
	Minimum	24	14	20	34	30	30	28	17	16	27	26	28	29	18	12	12	25	25	29	33	25	15	12	27	21	29	26	36	26	19	26	23.
Paterson	Maximum	35	36	45	51	40	40	40	34	39	44	43	43	39	38	38	33	43	43	38	40	41	42	38	39	33	48	57	54	45	41	36	41.
	Minimum	22	18	21	36	30	29	25	20	19	29	28	29	29	22	11	16	25	31	30	29	30	15	15	25	18	28	28	35	26	20	22	24.
Plainfield	Maximum	35	36	45	52	47	46	35	37	41	41	45	40	41	36	26	36	44	44	40	43	36	28	47	35	37	50	57	48	46	38	38	40.
	Minimum	26	10	15	29	28	29	25	16	13	26	24	31	30	17	10	11	23	28	32	32	25	15	10	26	20	30	23	31	26	18	20	22.
Ridgefield	Maximum	32	35	42	51	39	40	31	33	39	42	42	37	38	34	22	33	41	43	36	41	33	24	36	29	33	49	57	42	44	37	37	37.
	Minimum	19	15	22	32	29	28	19	17	16	22	28	29	24	20	9	11	23	30	32	31	17	13	13	18	16	31	28	26	25	18	22	22.
Somerville	Maximum	34	40	47	55	41	42	35	38	43	46	48	36	40	36	28	33	44	45	38	43	36	28	39	36	33	52	59	48	45	41	38	40.
	Minimum	20	14	13	35	26	32	28	16	12	26	30	25	25	15	12	11	21	22	27	31	25	15	10	25	22	26	21	31	23	17	22	21.
South Orange	Maximum	35	....	46	....	43	40	33	35	43	43	45	40	39	35	31	35	44	....	45	43	38	27	39	37	32	50	58	52	45	42	33	40.
	Minimum	22	....	12	....	27	32	25	17	14	26	22	25	26	18	10	10	21	....	26	29	27	13	12	26	19	28	23	36	24	16	21	21.
Verona	Maximum	31	34	44	48	39	38	30	32	38	40	40	34	37	32	21	31	40	40	35	39	33	23	36	30	34	45	54	44	41	29	32	36.
	Minimum	19	13	24	38	34	27	19	17	18	29	28	31	24	19	8	12	23	31	28	30	16	13	12	19	16	33	31	27	24	17	14	22.
New York, N. Y	Maximum	35	36	45	52	48	45	33	37	41	42	45	40	42	36	26	35	45	44	40	43	36	27	37	35	37	50	55	48	46	38	38	40.
	Minimum	21	19	26	37	40	30	22	20	23	30	33	33	30	24	11	16	26	34	35	32	20	16	18	23	18	34	35	34	28	20	15	25.
The Southern Interior.																																	
Belleplain	Maximum	35	43	49	57	48	55	39	35	46	44	47	42	43	36	32	36	47	48	52	43	39	29	43	43	48	52	62	54	57	46	46	45.
	Minimum	23	10	21	25	24	33	23	14	8	21	21	23	25	11	12	5	23	18	32	29	21	8	8	19	25	28	27	24	28	17	30	20.
Bridgeton	Maximum	33	38	49	50	53	42	42	32	43	44	45	36	40	34	26	33	46	50	48	42	33	30	41	45	44	50	60	50	49	41	37	42.
	Minimum	18	24	28	32	37	30	21	19	26	27	30	26	22	14	15	21	25	33	31	28	15	19	25	26	30	35	33	31	24	29	21	25
Burlington	Maximum	36	41	45	54	52	45	37	34	45	44	45	44	42	40	34	34	44	45	43	42	38	29	41	42	40	52	56	52	48	45	43	43.
	Minimum	28	18	22	36	34	37	27	25	22	34	34	33	31	27	15	16	26	32	34	31	29	15	16	29	25	30	34	33	33	26	33	27.
Clayton	Maximum	32	43	42	56	52	54	35	31	44	43	46	37	39	33	25	34	45	47	44	42	34	30	42	42	44	50	60	48	46	37	39	41.
	Minimum	25	17	21	30	33	34	30	20	16	28	26	30	28	20	13	12	26	23	32	31	15	16	15	27	25	31	33	29	30	23	25	24.
Hammonton	Maximum	35	43	50	63	47	55	32	33	44	44	44	39	41	35	29	36	45	46	51	43	37	29	43	43	45	50	61	54	50	40	42	43.
	Minimum	24	15	24	31	30	35	30	16	15	27	24	31	29	19	15	12	25	24	31	31	27	14	15	27	27	30	29	34	27	21	29	24.
Hightstown	Maximum	32	38	47	54	44	42	34	33	42	43	44	36	38	34	28	32	43	44	45	40	36	25	39	36	37	50	57	50	44	41	35	40.
	Minimum	22	16	18	33	28	31	26	16	12	25	22	26	28	17	12	13	25	20	27	30	25	15	11	26	23	28	25	33	26	19	24	22.
Imlaystown	Maximum	35	38	48	55	51	52	34	33	42	....	....	42	38	38	31	33	42	44	43	41	37	28	38	37	40	....	57	50	46	44	39	41.
	Minimum	20	16	17	33	29	33	28	17	14	....	....	21	29	21	9	13	25	21	28	30	27	15	10	26	24	....	26	36	26	20	22	22.
Indian Mills	Maximum	35	42	50	58	53	54	36	33	40	42	44	42	40	38	32	36	45	43	48	42	40	29	43	40	42	50	60	55	48	45	40	43.
	Minimum	24	12	15	28	30	34	29	9	12	25	21	27	28	14	14	9	23	20	33	29	26	13	10	25	27	28	28	32	26	19	29	22.
Lakewood	Maximum	34	39	47	53	47	54	34	33	41	42	42	37	39	33	28	33	43	43	51	41	35	26	40	36	40	49	59	53	49	43	40	41.
	Minimum	25	15	22	31	27	32	29	17	14	27	25	26	30	18	12	13	26	22	27	32	18	16	10	29	27	34	25	35	26	20	24	23.
Moorestown	Maximum	32	40	45	55	48	46	34	30	41	42	44	37	39	33	23	34	44	44	41	42	35	26	40	38	38	53	55	44	47	36	40	40.
	Minimum	21	16	19	33	32	33	27	19	15	29	29	32	26	21	13	14	24	25	34	31	20	15	16	27	25	30	29	30	30	22	22	24.
Pemberton	Maximum	35	39	45	53	45	54	35	32	42	43	44	36	39	34	28	33	43	43	45	42	36	27	40	38	41	51	56	52	47	43	40	41.
	Minimum	26	16	17	29	32	33	30	19	15	26	21	30	32	19	15	15	25	22	33	31	27	17	14	29	26	30	29	35	28	22	27	24.
Pleasantville§§	Maximum	36	44	50	57	53	48	40	31	44	44	47	40	43	36	27	37	47	48	51	48	35	31	41	39	42	52	63	49	53	47	42	44.
	Minimum	21	13	17	31	28	38	31	15	16	20	23	27	30	14	15	10	13	21	28	29	26	11	11	24	29	30	30	33	24	18	22	22.
Runyon	Maximum	34	29	38	42	48	48	37	37	44	38	38	36	38	40	27	33	42	46	39	43	39	38	40	37	37	58	59	52	49	46	36	40
	Minimum	13	5	8	34	27	32	22	14	4	24	30	32	12	10	10	8	22	15	36	31	22	18	4	26	21	19	17	27	20	18	21	19
Trenton	Maximum	34	43	48	54	43	43	35	36	43	43	44	37	39	35	25	34	42	45	40	44	39	25	41	35	38	50	60	44	46	37	40	40
	Minimum	23	19	25	36	35	33	27	20	20	30	30	33	26	23	14	15	28	29	35	32	19	15	19	25	23	33	32	33	28	21	20	25
Tuckerton	Maximum	38	42	50	60	50	50	42	35	45	45	47	42	48	41	37	38	47	45	50	45	40	35	35	45	44	53	64	60	45	46	47	45
	Minimum	25	14	27	32	32	30	28	15	14	24	22	28	29	27	12	10	24	25	30	32	30	20	26	30	25	33	34	35	19	30	32	25
Philadelphia, Pa	Maximum	35	41	45	54	47	48	38	33	45	44	47	40	41	36	27	34	46	44	44	43	39	29	40	42	39	53	56	52	49	38	43	42
	Minimum	26	22	31	39	40	35	32	25	28	35	35	34	31	26	16	19	30	35	37	35	23	18	23	31	28	34	40	37	35	26	26	30
The Sea Coast.																																	
Asbury Park	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Atlantic City	Maximum	36	43	45	50	51	49	39	31	40	45	48	42	43	37	26	36	47	43	49	43	39	30	39	38	42	52	54	51	53	41	46	42
	Minimum	22	19	37	37	40	36	29	23	23	29	29	37	29	26	16	16	33	34	33	34	23	17	23	32	32	36	39	37	35	25	24	29
Cape May City	Maximum	36	44	48	54	50	48	39	35	40	42	46	40	43	36	28	37	46	46	48	43	36	28	43	44	48	52	59	49	51	42	47	43
	Minimum	26	24	34	35	38	37	31	24	21	30	32	35	30	23	18	20	30	28	37	35	23	19	24	30	34	34	39	37	35	27	36	29
Long Branch	Maximum	40	39	47	55	54	55	35	27	37	42	44	38	39	33	26	32	42	44	46	41	36	43	35	31	33	44	52	40	42	37	36	40
	Minimum	22	17	24	34	33	34	29	22	19	24	23	29	25	20	12	14	26	24	34	33	25	15	12	22	19	26	24	25	25	21	19	23
Sandy Hook	Maximum	34	37	45	50	43	44	34	34	39	41	41	38	38	33	25	32	41	42	41	40	36	25	37	33	36	45	52	48	48	38	38	38
	Minimum	24	21	28	38	37	42	26	22	26	31	32	33	29	25	14	18	30	31	36	34	21	17	19	24	23	34	33	34	30	21	19	27

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charg to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville••	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followi record. ••Observations taken in the morning, and entered on preceding day. † Pan frozen.

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...ARY OF THE ... 1931

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

OL. XXXVI. FEBRUARY, 1931. No. 2

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to e Superintendent of Documents, Government Printing Office, Washington, D. C. It furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month was characterized by a temperature that ran rather ersistently above the normal, especially during the latter half. here were only about six days that the daily averages were be- w normal and nearly all stations experienced these six during e first half of the month. The highest temperatures came in e closing days, mostly the 26th and 28th and were uniformly the fifties; the lowest were registered quite generally on the l and 11th, and ranged from a little above zero in the south- n and sea coast sections to a few degrees below zero in the rthwestern portion.

While the average amount of precipitation continues at about e same percentage of normal as has prevailed for over a year, e frequency with which it occurs is greater. The percentage as sixty this month as compared with an average of 76 per- nt for the past fourteen months. The wet periods were from e 7th to 10th, inclusive, and the 17th to 20th, inclusive, with one-day period in between on the 14th. Practically no ap- eciable amounts occurred on any other dates. Snowfall con- ued light with practically none in the southern part of the ate. The bulk of what fell occurred in the Highlands during e precipitation period of the 7th to 10th.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from servations of 40 stations, was 33.3°, which was 3.9° above rmal. The highest temperature was 62° at Flemington on the th, and the lowest, 9° below zero, at Sussex on the 11th. e greatest daily range of temperature was 44° at Belleplain the 26th. The highest monthly mean temperature was 36.5° Atlantic City, and the lowest, 27.8° at Layton.

The temperature departure from the normal for the year 1931, date, by sections, is: The Highlands, +2.7°; Red Sandstone ain, +3.4°; Southern Interior, +2.6°; Sea Coast, +2.7°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from ob- vations of 47 stations, was 2.18 inches, which was 1.45 inches low normal. The average total snowfall at 20 selected sta- ns was 3.0 inches. The greatest monthly precipitation was 42 inches, at Chatham, and the least, 0.81 inch at Cape May ty. The greatest amount of precipitation in any 24 consecu- e hours was 1.45 inches at Bayonne on the 9th.

The precipitation accumulated departure from the normal for e year 1931, to date, by sections, is: The Highlands. —3.04 hes; Red Sandstone Plain, —2.61 inches; Southern Inter- , —3.03 inches; Sea Coast, —3.15 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 12 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 40 miles per hour from the northwest at Sandy Hook on the 14th, and from the southeast at Atlantic City on the 17th.

MISCELLANEOUS.

The per cent of possible sunshine was 59, or 3 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.03 inches, or 0.07 inch below normal. The highest reading was 30.50 inches on the 7th at Ridgefield, and the lowest 29.55 inches on the 9th at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 2.5 feet, and the highest 4.5 feet on the 18th. The mean stage at Trenton was not ascertained as the river was frozen during most of the month.

Dense fog occurred on the following dates: 8, 9 and 17th. It was quite general throughout the State on the 8th and 9th. Sleet was reported on the 7th, 8th, 9th, 10th and 19th.

ERRATA.

November 1930. Asbury Park, maximum temperature should be 70° on the 19th. Bridgeton, maximum temperature should be 70° on the 17th. Clayton, maximum temperature should be 72° on the 9th. Little Falls, maximum temperature should be 67° on the 9th. New Milford, greatest amount of precipitation in 24 hours should be 1.65 inches on the 17th.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	23.9	54	−2	3.93	5.85	1.44					
1886	28.9	64	−10	5.42	8.00	4.13	......	......	......	......	......
1887	33.9	69	6	5.24	6.74	4.13	......	......	......	......	......
1888	30.6	60	−5	3.53	6.01	2.04	......	......	......	13	13
1889	27.7	53	−3	2.49	3.80	1.65	......	......	......	9	8
1890	**39.9**	76	**14**	4.17	5.32	2.43	......	......	......	9	8
1891	38.0	71	1	5.11	7.20	3.70	......	......	......	12	10
1892	33.6	58	7	1.63	3.62	0.67	......	6	9	13	14
1893	30.1	63	−1	5.73	8.90	3.14	......	7	9	13	7
1894	29.7	62	−11	4.42	6.17	3.25	...	7	8	13	11
1895	23.6	57	−12	1.28	2.34	*0.55*	......	9	8	11	11
1896	32.1	62	−12	**6.77**	**10.06**	**4.82**	11.6	13	9	6	5
1897	32.5	59	−6	3.61	6.37	2.38	6.7	9	9	11	12
1898	32.7	65	−15	3.48	5.45	1.55	8.0	8	10	10	8
1899	25.8	60	−17	6.06	8.77	3.78	2.0	12	7	9	9
1900	31.0	69	−6	5.30	7.88	3.27	**31.3**	10	6	12	15
1901	25.4	*52*	−6	*0.94*	*1.65*	0.69	9.6	9	9	10	10
1902	27.4	62	−7	6.24	8.44	4.29	4.9	15	9	4	4
1903	33.7	70	−16	4.87	6.60	3.74	16.5	12	6	10	9
1904	24.8	65	−16	2.45	3.09	1.36	6.7	12	8	8	10
1905	*23.4*	53	−18	2.53	3.96	0.70	5.6	13	8	8	8
1906	30.9	64	−12	2.58	3.85	1.77	7.3	14	7	7	7
1907	23.6	55	−22	2.67	3.90	1.82	5.4	14	7	7	7
1908	28.1	65	−17	4.79	7.44	2.85	20.8	14	7	7	8
1909	37.8	72	−2	4.96	6.78	3.55	11.9	10	10	9	9
1910	30.5	69	−11	3.08	4.81	1.06	2.3	6	10	12	12
1911	30.9	67	−12	2.78	4.06	1.76	6.2	10	9	9	10
1912	27.7	61	−14	2.49	3.12	1.68	11.2	8	7	13	11
1913	30.6	70	−5	2.49	3.21	1.48	2.8	11	12	6	5
1914	25.9	67	−12	2.85	4.94	1.89	3.5	16	6	6	7
1915	35.7	75	−7	5.37	7.28	2.97	15.1	12	7	9	9
1916	28.1	63	−18	4.21	6.17	2.84	3.5	11	6	11	8
1917	28.1	62	−19	1.95	2.80	0.92	11.4	10	6	13	11
1918	29.0	67	*−23*	2.08	3.41	1.03	8.3	10	9	9	11
1919	33.6	65	4	3.39	6.48	1.37	2.6	12	8	8	7
1920	27.9	54	−17	4.20	7.20	2.39	1.2	15	4	9	10
1921	34.0	71	−5	3.81	5.82	2.58	20.0	11	8	10	11
1922	33.6	73	−10	2.94	4.60	1 80	13.6	10	8	10	10
1923	26.1	56	−12	2.58	3.74	1.51	8.5	10	8	10	10
1924	28.9	62	−3	4.10	6.11	2.45	13.8	10	8	10	12
1925	37.3	72	−1	2.23	4.64	1.18	11.9	13	5	11	9
1926	29.4	57	−11	4.54	6.30	2.86	*0.7*	12	6	10	7
1927	36.1	66	4	3.12	4.55	2.18	21.2	9	5	14	11
1928	32.1	63	−6	4.05	5.63	2.17	5.1	10	8	10	11
1929	31.6	63	−9	4.06	5.92	2.76	4.4	12	7	10	10
1930	35.6	**80**	−10	2.80	5.13	1.07	9.2	13	7	8	8
1931	33.3	62	−9	2.18	3.42	0.81	4.2	13	7	8	9

W. B. O.Philadelphia-3-25-31-830.

Climatological Data for February, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	33.4^{e}	−6.3	54^{e}	28	8^{c}	3	29^{e}	2.24	−1.60	0.65	....	9	13	4	11	....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	30.1	+4.5	53	28	4	3†	34	2.42	−1.60	0.88	7.0	10	14	2	12	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	....	....	....	....	0	11	....	2.06	−1.00	0.83	16.0	8	11	8	9	nw.	Brice E. Riker.
Dover	Morris	600	47	30.6	+4.4	56	28	3	11	32	2.59	−1.44	1.05	4.0	8	10	10	8	....	William C. Harris
Layton	Sussex	480	30	27.8	+4.2	52	28	−5	11	41	2.19	−0.55	0.80	16.5	8	11	3	14	nw.	A. M. Depue.
Long Valley	Morris	520	1	30.7	....	52	28	6	3	30	2.01	....	0.68	5.4	7	12	6	10	w.	S. N .Dilts.
Newton	Sussex	769	47	29.4	+2.9	56	28	3	3†	36	2.10	−1.46	0.65	12.2	9	14	1	13	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	32.4	+4.5	53	28	11	3	26	1.78	−1.86	0.54	3.0	7	11	8	9	....	Town Engineer.
Sussex	Sussex	442	36	28.3	+2.9	54	28	−9	11	40	2.08	..1.30	0.61	14.7	7	16	2	10	nw.	A. J. W. Mowatt
Means and extremes	....	....	....	30.3	+4.2	56	28	−9	11	41	2.16	−1.35	1.05	9.8	8	12	5	11	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	34.6	+5.2	55	28	14	5†	25	3.07	−0.91	1.45	T.	5	15	5	8	nw.	William Mann.
Boonton	Morris	400	§41	31.1	....	56	28	5	3	36	2.03	−1.94	0.79	....	6	14	3	11	nw.	John Kline.
Canoe Brook	Essex	173	1	31.0	....	55	28	7	5	35	2.58	....	0.98	....	5	15	6	7	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	27	....	....	....	....	....	....	....	3.42	−0.01	1.22	3.0	9	13	5	10	....	Paul Molitor, Sr.
Elizabeth	Union	45	52	34.5	+4.0	58	28	12	6†	36	2.66	−1.51	0.88	2.8	9	17	3	8	nw.	Union County Park Com.
Flemington	Hunterdon	140	§45	34.3	+5.5	62	28	8	3	37	2.43	−1.11	0.86	2.0	8	16	4	8	nw.	Hiram E. Deats.
Jersey City	Hudson	10	33	34.1	+3.5	55	28	12	11	26	2.54	−1.18	0.70	4.1	9	9	9	10	n.	S. K. Pearson.
Lambertville	Hunterdon	430	44	32.1	....	50	26	8	3	26	2.53	−0.95	0.86	4.2	10	15	3	10	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	32.8	+3.2	58	28	9	3†	33	2.42	−1.05	0.64	3.3	8	12	7	9	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	78	33.8	+3.0	54	28	11	3	30	2.37	−1.25	0.88	3.0	8	13	7	8	nw	N. J. Experiment Station
New Milford‡‡	Bergen	....	13	....	....	....	....	....	....	....	2.83	....	1.08	....	7	....	....	....	....	Hackensack Water Co
Paterson	Passaic	80	60	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Vincent A. Messineo.
Plainfield	Union	120	43	33.2	+4.5	56	28	9	3†	33	2.24	−1.72	0.80	3.8	8	15	3	10	nw.	S. K. Pearson.
Ridgefield	Bergen	80	14	31.2	....	57	28	8	3	32	2.46	....	0.95	5.8	7	13	7	8	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	33.6	+4.7	56	28	6	3	36	2.48	−1.30	0.93	1.6	8	13	6	9	nw.	Julius Gerlich.
South Orange	Essex	200	59	34.6^{f}	+5.6	53^{f}	26	10^{f}	3†	32^{f}	2.59	−1.34	....	3.2	9	13	7	8	w.	Everett W. Bird.
Verona	Essex	490	5	30.6	....	54	28	8	3†	29	2.82	....	1.04	6.4	10	11	6	11	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	....	....	....	....	....	....	....	2.81	....	1.05	....	7	....	....	....	....	Hackensack Water Co.
New York, N. Y.	....	365	61	34.1	+2.8	55	28	12	11	32	2.44	−1.38	1.00	3.8	10	9	9	10	nw.	U. S. Weather Bureau.
Means and extremes	....	....	....	33.0	+4.4	62	28	5	3	37	2.60	−1.19	1.45	3.3	8	14	5	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	34.8	+3.3	57	28	4	1	44	1.18	−2.41	0.28	....	7	8	4	16	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	48	36.3	+2.6	56	28	15	10	32	1.88	−1.94	0.79	T.	6	17	3	8	sw.	Bennett K. Matlack
Burlington	Burlington	12	§45	35.6	+4.3	54	13†	14	3†	30	2.17	−1.33	0.93	0.7	9	16	5	7	nw.	Public Service Power Co.
Clayton††	Gloucester	134	31	35.2	+4.5	57	28	14	11	35	0.94	−2.64	0.60	T.	6	13	7	8	nw.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§25	35.6	....	58	28	13	3	35	1.82	−1.59	0.47	0.5	7	15	6	7	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	33.0	+3.6	55	28	10	3†	33	2.01	−1.59	0.68	2 5	6	15	5	8	nw.	Charles Welsh.
Imlaystown	Monmouth	115	38	33.0^{d}	+2.6	54^{d}	13†	10^{d}	11	31^{d}	2.16	−1.38	0.78	....	8	15	3	10	nw.	Carlton Lawrence.
Indian Mills‡‡	Burlington	76	42	35.1	+3.3	58	28	10	1	38	2.15	−1.30	0.55	1.0	7	12	7	9	nw.	James M. Armstrong.
Lakewood	Ocean	54	27	34.3	+4.0	55	13	11	11	28	2.35	−1.22	0.70	1.0	7	16	3	9	w.	R. W. Holman.
Moorestown	Burlington	....	68	34.2	+2.9	55	28	13	3†	30	1.62	−1.86	0.84	0.8	5	14	3	11	nw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	24	....	....	....	....	....	....	....	1.17	−1.62	0.28	0	7	....	....	....	....	William L. Flick.
Pemberton	Burlington	55	....	35.3	....	55	28	14	11	29	1.55	....	0.58	1.4	7	14	1	13	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	....	....	....	....	8	1	....	1.37	−1.44	0.62	....	5	18	3	5	nw.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	32.7	....	54	26	4	11	42	2.59	....	1.05	....	7	17	4	7	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	34.4	+3.7	55	28	13	11	28	2.08	−1.19	1.03	1.1	7	12	5	11	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	....	....	....	....	....	....	....	2.26	....	1.06	1.9	6	....	....	....	....	Edward H. Ristow.
Tuckerton	Ocean	23	38	36.4	+5.6	55	13†	8	11	37	1.04	−2.62	0.30	0.1	8	12	4	12	nw.	John H. Brown.
Philadelphia, Pa	....	117	60	37.4	+3.5	55	28	18	11	25	1.92	−1.40	1.19	1.1	8	10	7	11	nw.	U. S. Weather Bureau.
Means and extremes	....	....	....	34.7	+3.6	58	28	4	1†	44	1.84	−1.65	1.06	1.0	7	14	4	10	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	35.2	+3.8	57	13	10	10	31	3.18	−0.32	0.95	0.5	9	19	3	6	nw.	Information Bureau.
Atlantic City	Atlantic	16	58	36.5	+2.9	55	26	16	11	27	1.12	−2.24	0.48	T.	7	12	7	9	nw.	U. S. Weather Bureau.
Cape May City	Cape May	17	47	36.4	+2.3	52	26	19	3	22	0.81	−2.48	0.28	T.	7	11	5	12	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	33.9	+3.5	58	28	13	1	30	2.36	−1.55	0.66	3.2	9	13	5	10	nw.	William D. Martin.
Sandy Hook	Monmouth	22	33	34.2	+3.6	52	28	16	11	29	1.85	−1.90	0.77	3.7	9	13	7	8	nw.	U. S. Weather Bureau.
Means and extremes	....	....	....	35.2	+3.2	58	28	10	10	31	1.36	−1.70	0.95	1.5	8	14	5	9	nw.	
For the State	....	....	....	33.3	+3.9	62	28	−9	11	44	2.18	−1.45	1.45	3.0	8	14	5	9	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Cane Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for February, 1931

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware							.05	*	*	1.10				.20			.14	.65	.05	.05												2.24
Charlotteburg	Passaic							.07	.45	.59	.08				.14			.04	.84	.10	.08	.03											2.42
Culvers Lake	Delaware		T.					.08	.34	.83	.05				T.			.08	.50	.10	.08	T.											2.06
Dover	Passaic							.30	*	.87				.23				.70	.35	.05	.09		T.										2.59
Layton	Delaware		T.					*	.47	.80	T.				.25			.11	.40	.03	.13	T.											2.19
Long Valley	Morris							.01	.47	.68	.03							.25	.55	T.	.02												2.01
Newton	Delaware		T.					.10	.29	.64	T.				.65			.17	.07	.07	.08	.03					T.	T.					2.10
Phillipsburg	...do							.24	.26	.50			T.	.11	.08			.54	.05	T.	T.	T.	T.										1.78
Sussex	Hudson							.10	.38	.41								.04	.61	.29	.25												2.08
The Red Sandstone Plain.																																	
Bayonne	Coast		T.					T.	.10	1.45	T.							*	1.32	.20	T.												3.07
Boonton ‖	Passaic								.23	.10	.79				.15				.75	T.	.01	T.											2.03
Canoe Brook ‖	Essex								.47	.17	.98	T.			.14			T.	.82		T.												2.58
Chatham ‖	...do								.29	.27	1.22	T.			.28			.09	.86	.05	.17	.19		T.									3.42
Elizabeth	Coast		T.					.07	.40	.88	.26	T.			.15			.09	.74	.05	.02												2.66
Flemington	Raritan				T.			T.	.32	.86	.21				.16			.13	.71	.03	.01	T.											2.43
Jersey City	Coast		T.		T.			.20	.28	.70	.15				.10			.46	.59	.02	.04	T.											2.54
Lambertville	Delaware				T.			.18	.24	.86	.25				.15			.18	.53	.06	.05	.03											2.53
Little Falls ‖	Passaic								.31	.18	.64				.10				1.15	.01	.02	.01											2.42
New Brunswick	Raritan		T.					.01	.37	.88	.21				.07			.09	.72	.02	T.	T.											2.37
New Milford.**	Hackensack							.32	.14	1.00					.21				1.08	.03	.05												2.83
Paterson	Passaic																																......
Plainfield	Raritan		T.		T.			.20	.20	*	.60			T.	.41				*	.80	.03												2.24
Ridgefield**	Hackensack		T.		T.			.35	.06	.95	T.			T.	.10			T.	.87	.05	.08	T.											2.46
Somerville	Raritan							.03	.34	.93	.19				.11			.15	.72	.01	T.	T.											2.48
South Orange	Rahway							*	*	1.25	.31	T.			.13			.07	.78	.03	.02												2.59
Verona**	Passaic		T.					.36	.19	1.04	.01			.02	.08			.89	.14	.05	.04	T.											2.82
Woodcliff Lake**	Hackensack							.45	.18	.34					.11				1.05	.04	.04												2.81
New York, N. Y***	Coast		T.		T.			.29	.20	.76	.04			.01	.09			.89	.11	.02	.03	T.											2.44
The Southern Interior.																																	
Belleplain	Tuckahoe								.12	.18	.28				.25			.05	.22	.08													1.18
Bridgeton	Coast							.04	.21	.79				.27				.53		.04													1.88
Burlington	Delaware							.04	.06	.93	.33		T.	.02	.06			.12	.58	.03		T.											2.17
Clayton	Delaware							.01	.02	.12					.09			.60		.10													0.94
Hammonton	Mullica							T.	.25	.35	.31	T.			.30			.11	.47	.03													1.82
Hightstown	Raritan							T.	.34	.68	.36				.08			.10	.55	T.													2.11
Imlaystown	Monmouth							.05	.22	.34	.44				.18			.13	.78	.02													2.16
Indian Mills	Mullica							T.	.15	.51	.48				.29			.14	.55	.03		T.											2.15
Lakewood	Metedeconk							T.	.26	.53	.36				.35			.10	.70	.05	T.	T											2.35
Moorestown ‖	Delaware								.10	.12	.84			T.	.06				.50		T.												1.62
Northfield	Coast								.08	.28	.81				.20			.15	.18	.07													1.17
Pemberton								T	.12	.58	.15			.05				.20	.43	.02		T.											1.55
Pleasantville ‖	Coast								T.	.10	.62	T.				.22		T.	.35		.08												1.37
Runyon	Coast								.32	1.05	.08							.08	.95	.06	.05												2.59
Trenton***	Delaware							.12	.09	1.03	T.			.02	.07			.74	T.	.01	T.	T.	T.										2.08
Trenton No. 2 ‖	Delaware								.20	.11	1.06				.07	T.		T.	.80		.02	T.	T.	T									2.26
Tuckerton	Coast							.01	.05	.22	.10	T.			.26			.05	.30	.05													1.04
Phila., Pa***	Delaware							.13	.04	1.17			T.	.01	.03		T.	.52	.01	.01	T.	T.											1.92
The Sea Coast.																																	
Asbury Park	Coast							.10	.45	.58	.35			T.	.35			.20	.95	.10	.10												3.18
Atlantic City***	...do							.04	.04	.48	T.			.09	.15		T.	.25		.07		T.											1.12
Cape May City	...do							T.	.04	.24	.09				.20			.17	.05	.02	T.												0.81
Long Branch**	...do							.19	.10	.50	.17				.16			.66	.46	.03	.09	T.											2.36
Sandy Hook***	...do		T.					.22	.11	.56	.04			T.	.08			.72	.05	.05	.02	T.											1.85

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Highest: Miles per hour	Highest: Direction	Highest: Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.04	30.44	7	29.56	9	14.8	40	se.	17	75	64	69	59
ong Branch	30.03	30.46	7	29.55	9	......	......	......	......	73	61	67	......
ooorestown	......	......	......	......	......	......	......	......	......	76	60	65	......
ew York, N. Y	30.03	30.49	7	29.61	9	16.1	45	nw.	14	68	57	61	60
hiladelphia, Pa	30.06	30.46	7	29.62	9	13.2	34	nw.	14	64	50	55	61
idgefield	30.03	30.50	7	29.66	9	......	......	......	......	......	......	......	......
andy Hook	30.01	30.49	7	29.61	9	15.0	40	nw.	14	78	68	73	57
renton	30.04	30.49	7	29.60	9	10.0	32	nw.	14	73	58	62	60
erona	......	30.49	7	......	......	7.6	......	......	......	71	55	61	......

Daily Temperatures for February, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	29	42	36	46	37	45	35	....	....	....	....	....	49	41	39	43	44	43	40	34	38	41	45	46	51	51	46	54	....	....	....	42.4[e]
	Minimum	13	23	8	23	12	23	17	....	....	....	....	....	32	23	14	27	34	35	33	28	26	32	31	25	25	25	27	25	....	....	....	24.4[e]
Charlotteburg	Maximum	27	42	38	42	40	43	36	32	34	32	29	40	48	46	41	42	44	39	36	32	34	40	39	42	45	45	41	53	....	....	....	39.4
	Minimum	10	15	4	20	8	12	11	17	29	23	4	8	29	20	20	26	32	32	31	26	20	27	26	32	22	24	30	25	....	....	....	20.8
Dover	Maximum	27	42	38	45	41	44	31	32	33	34	30	41	48	40	38	43	44	40	36	33	36	43	42	44	48	48	43	56	....	....	....	40.0
	Minimum	11	16	7	23	9	17	13	19	30	16	3	14	31	16	11	29	33	34	31	28	22	30	27	22	23	26	29	25	....	....	....	21.2
Layton	Maximum	24	40	34	41	39	40	25	26	33	33	31	42	48	41	38	41	48	39	40	32	36	41	40	41	46	45	39	52	....	....	....	38.4
	Minimum	9	14	−1	24	3	11	8	9	25	15	−5	1	29	17	10	11	20	33	32	27	18	30	28	22	23	26	30	16	....	....	....	17.3
Long Valley	Maximum	21	40	35	44	37	43	38	32	34	34	28	40	45	42	37	42	43	42	40	41	34	41	40	42	46	48	41	52	....	....	....	39.4
	Minimum	12	21	6	21	10	14	15	22	29	22	7	10	30	19	12	29	33	34	32	28	23	30	29	23	24	26	31	25	....	....	....	22.0
Newton	Maximum	29	40	37	45	40	44	29	26	33	34	33	41	48	48	37	40	45	39	39	34	36	43	44	43	47	47	40	56	....	....	....	39.9
	Minimum	9	16	3	20	8	24	11	12	23	14	3	10	32	17	9	27	34	31	28	19	18	27	19	23	21	23	28	20	....	....	....	19.0
Phillipsburg	Maximum	29	43	31	46	37	45	29	31	35	35	30	39	46	46	39	45	43	44	38	35	37	46	42	40	48	50	46	53	....	....	....	40.3
	Minimum	17	25	11	23	14	19	19	20	31	17	11	17	32	20	17	31	34	36	33	30	30	34	32	26	26	26	32	27	....	....	....	24.6
Sussex	Maximum	22	40	35	39	36	39	34	27	34	34	31	41	46	43	38	40	45	42	38	32	33	39	37	41	44	45	39	54	....	....	....	38.1
	Minimum	10	14	3	22	7	13	12	14	26	20	−9	1	29	18	12	20	32	33	31	26	12	27	22	22	22	26	31	23	....	....	....	18.5
The Red Sandstone Plain.																																	
Bayonne	Maximum	31	46	34	45	36	44	36	38	37	34	34	43	55	50	39	45	50	41	45	38	42	44	43	48	46	45	43	55	....	....	....	42.4
	Minimum	17	26	16	17	14	22	24	26	30	25	14	20	40	22	18	32	43	35	37	30	31	33	32	28	24	32	34	32	....	....	....	26.9
Boonton§§	Maximum	30	42	40	41	41	45	25	32	29	30	25	46	45	40	38	44	45	41	35	33	44	47	46	50	49	56	47	56	....	....	....	40.8
	Minimum	13	14	5	16	9	15	12	17	24	28	9	10	24	30	13	28	30	34	32	29	24	27	29	24	25	26	32	20	....	....	....	21.4
Canoe Brook§§	Maximum	32	44	38	46	40	45	26	33	34	31	31	42	50	35	38	46	46	41	35	33	37	44	43	45	49	51	44	55	....	....	....	40.5
	Minimum	13	17	8	14	7	14	10	19	26	29	9	8	27	32	14	21	32	35	33	29	24	30	29	25	21	22	32	20	....	....	....	21.4
Elizabeth	Maximum	30	47	38	49	41	48	39	39	38	37	32	46	52	49	40	47	46	46	42	35	42	48	45	48	51	53	46	58	....	....	....	44.0
	Minimum	14	23	13	22	15	12	20	28	33	28	12	19	30	25	15	29	30	37	34	30	27	31	30	26	26	27	33	24	....	....	....	25.0
Flemington	Maximum	35	48	40	50	47	48	37	32	35	35	37	47	51	47	44	51	43	43	41	36	39	49	47	50	56	56	49	62	....	....	....	44.8
	Minimum	15	20	8	19	12	18	15	21	30	27	11	15	30	26	15	30	33	35	33	29	26	31	31	25	26	29	30	25	....	....	....	23.8
Jersey City	Maximum	29	45	36	45	37	44	30	39	38	35	33	43	52	50	37	46	48	40	44	37	38	45	42	46	48	52	42	55	....	....	....	42.0
	Minimum	15	23	14	24	15	26	22	27	33	25	12	23	38	25	15	31	37	35	33	29	28	31	30	27	27	29	31	29	....	....	....	26.2
Lambertville	Maximum	28	44	32	45	35	46	32	32	33	33	27	39	47	45	41	47	42	42	39	33	37	45	41	44	48	50	46	48	....	....	....	40.0
	Minimum	13	18	8	23	12	23	17	22	31	23	9	28	32	25	15	29	31	34	33	29	28	32	30	27	25	27	26	28	....	....	....	24.2
Little Falls§§	Maximum	33	46	41	47	43	47	29	33	34	32	33	45	54	36	39	47	46	41	35	33	39	47	45	48	52	53	45	58	....	....	....	42.2
	Minimum	14	19	9	16	12	17	16	19	27	29	9	16	29	34	14	31	33	35	32	28	25	31	29	25	25	27	33	25	....	....	....	23.5
New Brunswick	Maximum	39	46	38	47	40	47	40	33	34	35	31	41	53	49	41	48	47	43	42	36	38	45	43	45	50	52	45	54	....	....	....	42.9
	Minimum	16	23	11	24	14	21	19	22	32	26	12	18	32	25	15	28	38	35	33	29	28	32	30	25	26	24	31	24	....	....	....	24.8
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	29	46	36	45	38	48	30	38	40	36	33	43	51	50	37	46	48	40	44	36	38	45	43	46	49	52	43	56	....	....	....	42.4
	Minimum	14	23	9	22	13	23	19	24	33	25	9	17	34	25	13	28	33	37	33	29	26	28	25	25	25	26	28	23	....	....	....	23.9
Ridgefield	Maximum	27	45	35	43	35	43	23	32	31	30	30	41	51	46	36	46	44	38	35	31	38	48	43	46	50	52	43	57	....	....	....	40.0
	Minimum	13	16	8	24	10	21	14	18	29	18	10	17	34	16	14	30	36	35	29	26	25	30	29	24	25	25	27	25	....	....	....	22.4
Somerville	Maximum	32	48	40	50	44	50	35	33	35	34	33	44	52	46	41	49	44	44	42	35	40	48	45	47	52	54	46	56	....	....	....	43.5
	Minimum	13	21	6	19	27	14	12	22	32	27	11	15	29	25	15	29	33	35	34	30	28	31	31	25	23	26	30	23	....	....	....	23.8
South Orange	Maximum	....	47	42	47	40	48	....	39	34	35	32	43	52	47	40	47	46	42	40	35	....	....	....	48	51	53	47	....	....	....	....	45.2[f]
	Minimum	....	23	10	20	12	17	....	27	32	28	10	16	29	24	14	27	34	36	34	20	....	....	....	25	25	24	32	....	....	....	....	24.0[f]
Verona	Maximum	25	43	35	43	36	43	22	32	32	31	27	40	48	44	36	43	44	39	34	31	35	44	41	43	47	48	40	54	....	....	....	38.6
	Minimum	13	14	8	19	12	22	15	19	30	14	8	16	35	16	13	30	38	34	29	27	25	30	28	24	25	29	31	26	....	....	....	22.5
New York, N. Y.	Maximum	29	45	36	45	38	44	30	39	38	35	33	42	54	50	38	46	48	40	44	37	38	45	42	46	49	52	42	55	....	....	....	42.1
	Minimum	15	19	14	24	16	27	23	27	33	23	12	23	39	18	15	32	38	35	32	29	28	32	31	27	28	30	31	29	....	....	....	26.1
The Southern Interior.																																	
Belleplain	Maximum	35	49	45	49	47	52	47	44	53	37	32	48	56	53	42	55	47	54	47	40	42	50	48	48	51	55	49	57	....	....	....	47.6
	Minimum	4	25	9	15	11	14	18	33	33	23	11	13	32	26	15	25	34	36	33	30	27	30	25	24	20	11	24	15	....	....	....	22.0
Bridgeton	Maximum	35	48	38	49	51	50	38	38	45	34	45	55	55	34	42	55	47	52	40	42	42	48	47	47	50	54	48	56	....	....	....	45.9
	Minimum	25	16	18	19	21	22	25	34	25	15	19	33	32	19	26	36	38	35	32	30	32	30	28	27	27	29	24	31	....	....	....	26.7
Burlington	Maximum	35	46	40	48	45	49	42	34	36	36	32	46	54	52	46	52	46	46	43	37	39	47	44	47	50	52	51	54	....	....	....	44.6
	Minimum	18	28	14	22	16	23	22	27	27	28	14	18	31	28	18	33	36	37	35	31	31	34	31	28	28	28	32	24	....	....	....	26.5
Clayton	Maximum	34	47	39	47	40	50	34	35	38	33	30	46	54	50	42	51	45	51	44	38	41	48	47	46	49	54	47	57	....	....	....	44.2
	Minimum	19	27	15	24	16	23	21	31	32	21	14	16	31	23	19	30	36	37	36	32	30	33	30	28	26	30	31	22	....	....	....	26.2
Hammonton	Maximum	34	48	41	47	44	50	37	41	43	36	30	48	55	49	41	52	46	52	45	38	41	48	46	47	50	53	49	58	....	....	....	45.3
	Minimum	14	27	13	25	14	21	19	31	32	26	14	18	32	25	18	31	36	37	35	32	30	33	28	27	25	26	30	23	....	....	....	25.8
Hightstown	Maximum	26	46	40	46	40	46	36	32	33	34	30	42	54	47	40	50	46	44	40	36	38	40	45	46	50	52	43	55	....	....	....	42.0
	Minimum	14	26	10	21	12	22	15	22	32	24	10	14	30	26	16	28	35	35	36	30	28	32	30	25	26	23	30	22	....	....	....	24.1
Imlaystown	Maximum	31	46	39	46	40	47	40	35	35	34	29	43	54	51	40	50	45	43	....	....	42	47	43	45	....	....	51	54	....	....	....	42.9[d]
	Minimum	14	23	11	24	13	19	18	25	32	28	10	12	33	26	16	28	36	35	....	....	28	29	30	20	....	....	21	21	....	....	....	23.2[d]
Indian Mills	Maximum	34	47	42	47	43	49	44	37	30	35	32	48	55	54	42	54	50	47	44	38	40	48	44	44	49	52	47	58	....	....	....	45.0
	Minimum	10	26	13	20	15	16	19	30	33	26	13	12	33	26	28	31	38	37	35	31	30	34	30	25	23	22	29	20	....	....	....	25.2
Lakewood	Maximum	30	47	38	46	38	47	37	40	38	35	28	44	55	54	39	51	47	44	41	35	38	47	44	45	48	52	46	53	....	....	....	43.1
	Minimum	12	25	13	22	14	20	20	30	35	28	11	18	31	26	17	31	34	37	35	32	29	31	30	25	25	26	30	26	....	....	....	25.5
Moorestown	Maximum	33	47	38	47	38	49	32	33	34	33	28	46	53	49	43	51	44	46	37	34	39	48	47	46	49	52	47	55	....	....	....	42.8
	Minimum	16	23	13	25	15	22	20	27	32	18	13	20	33	22	18	30	37	36	34	31	30	34	29	28	25	27	32	25	....	....	....	25.5
Pemberton	Maximum	31	46	39	48	42	49	40	36	37	35	30	45	54	53	41	50	46	47	44	37	40	48	46	45	48	52	47	55	....	....	....	44.0
	Minimum	15	27	15	24	16	21	21	29	33	29	14	17	34	27	19	29	38	37	35	34	31	33	31	27	25	27	31	26	....	....	....	26.6
Pleasantville§§	Maximum	37	48	38	49	....	....	....	....	....	....	....	....	....	....	....	....	48	54	49	37	42	49	48	49	47	55	49	53	....	....	....	......
	Minimum	8	25	15	18	16	18	20	24	35	28	15	16	....	35	16	20	35	38	26	32	31	32	26	15	23	20	22	18	....	....	....	25.1[a]
Runyon	Maximum	36	49	44	47	49	48	35	33	34	37	35	46	49	46	45	49	45	47	42	40	47	46	47	48	52	54	52	53	....	....	....	45.2
	Minimum	16	14	13	5	12	10	10	19	29	29	4	9	36	32	15	30	34	34	29	29	25	26	27	18	14	12	22	14	....	....	....	20.2
Trenton	Maximum	31	45	40	47	41	48	30	34	34	34	30	43	54	48	42	52	45	46	38	35	39	45	44	46	50	51	46	55	....	....	....	42.6
	Minimum	18	22	13	26	16	25	20	25	32	17	13	23	36	20	17	30	40	36	32	30	30	33	31	27	28	31	31	30	....	....	....	26.1
Tuckerton	Maximum	24	48	48	48	47	50	48	50	47	42	46	41	55	50	46	50	55	50	48	46	42	43	45	50	49	50	54	45	....	....	....	47.0
	Minimum	12	28	11	20	14	20	18	35	27	30	8	30	38	31	16	29	41	35	34	35	29	30	29	18	18	29	22	25	....	....	....	25.8
Philadelphia, Pa.	Maximum	35	47	37	48	41	50	33	38	38	36	32	47	54	49	45	50	48	49	40	38	41	47	46	47	51	54	48	55	....	....	....	44.4
	Minimum	23	26	20	30	22	29	27	30	35	22	18	30	39	24	20	32	42	39	37	34	34	37	34	32	32	35	35	34	....	....	....	30.4
The Sea Coast.																																	
Asbury Park	Maximum	30	30	30	47	37	48	48	40	43	38	34	44	57	53	45	55	52	45	44	47	46	48	45	49	52	54	47	55	....	....	....	45.1
	Minimum	18	17	17	17	17	25	25	12	33	10	16	13	38	28	16	32	38	37	36	29	29	32	32	27	28	37	20	30	....	....	....	25.3
Atlantic City	Maximum	35	49	36	49	34	53	41	44	46	35	33	48	45	45	41	47	45	52	40	36	41	49	48	45	43	55	49	44	....	....	....	43.9
	Minimum	20	28	19	31	20	29	25	39	35	25	16	26	38	24	19	32	38	39	36	33	32	33	30	29	29	28	31	30	....	....	....	29.1
Cape May City	Maximum	36	47	40	48	36	51	40	42	47	34	32	46	47	44	41	50	45	48	40	40	42	48	45	44	47	52	47	48	....	....	....	43.8
	Minimum	20	27	19	29	20	31	25	36	33	25	19	25	38	25	22	30	38	39	36	33	31	36	32	30	28	30	32	27	....	....	....	29.1
Long Branch	Maximum	28	44	34	45	38	46	31	40	37	34	31	42	53	48	40	50	45	40	37	33	37	45	42	45	51	52	45	58	....	....	....	41.8
	Minimum	13	23	20	25	17	24	22	33	31	21	15	19	35	20	17	30	37	34	31	29	29	32	30	25	27	28	32	28	....	....	....	26.0
Sandy Hook	Maximum	30	43	31	44	35	43	30	36	35	35	29	40	52	49	39	46	45	40	38	32	38	44	42	45	48	50	44	52	....	....	....	40.5
	Minimum	18	24	20	27	21	28	22	28	33	24	16	23	37	20	17	33	39	36	32	30	31	33	32	30	31	33	34	31	....	....	....	28.0

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville[**]	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record.

[**]Observations taken in the morning, and entered on preceding day. † Pan frozen.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVI. March, 1931. No. 3

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The temperature remained close to the normal throughout almost the entire month, the great majority of the days averaging a little above it. The highest temperatures were recorded mostly from the 25th to the 29th, inclusive, and were generally n the high fifties and low sixties. Freezing temperatures were experienced at all stations, mostly during the first part of the month, the lowest being a little above or a little below the 20-degree mark.

For the second time since last June and the third time during the past seventeen months, the precipitation average was above normal. The average for the State was 108% of normal, but in the Highlands there was less than the normal amount. Nearly all of the precipitation occurred during the first and third decades, with light, scattered amounts during the second except in the southern portion where they were general and moderate to heavy. There were no unusually heavy snows, the ones occurring on the 16-17th in the middle and southern parts of the tate and on the 19-20th in the northern portion being the main nes. They did not remain on the ground very long. Water upplies have been considerably augmented.

A northeaster on the 8th caused considerable damage along the Jersey shore from Asbury Park to Sandy Hook. The main damage, estimated at from $75,000 to $100,000, resulted from the undermining by waves at time of high tide.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 41 stations, was 39.2°, which was 0.7° above normal. The highest temperature was 64° at Bridgeton on the 5th, and at Paterson on the 28th, and the lowest, 12°, at Belleplain on the 14th. The greatest daily range of temperature was 0° at Layton on the 24th. The highest monthly mean temperature was 41.6° at Bayonne, and the lowest, 37.2° at Charlotteburg and Long Valley.

The temperature departure from the normal for the year, 1931, to date, by sections, is: The Highlands, +2.2°; Red Sandstone Plain, +2.7°; Southern Interior, +1.6°; Sea Coast, +2.2.°

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 47 stations, was 4.14 inches, which was 0.30 inch above normal. The average total snowfall at 20 selected stations was 2.0 inches. The greatest monthly precipitation was .06 inches, at Chatham, and the least, 2.60 inches at Layton. The greatest amount of precipitation in any 24 consecutive hours was 2.38 inches at Chatham on the 29th.

The precipitation accumulated departure from the normal for the year, 1931, to date, by sections, is: The Highlands. —3.52 inches; Red Sandstone Plain, —2.56 inches; Southern Interior, —2.14 inches; Sea Coast, —2.57 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 16 miles per hour, which was 2 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 54 miles per hour from the east at Atlantic City on the 8th.

MISCELLANEOUS.

The per cent of possible sunshine was 43, or 18 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 29.89 inches, or 0.12 inch below normal. The highest reading was 30.38 inches on the 27th at Trenton, and the lowest 29.10 inches at Long Branch on the 8th.

The mean stage of the Delaware River at Phillipsburg was 3.9 feet, and the highest 11.6 feet on the 30th. The mean stage at Trenton was 2.2 feet, and the highest 6.4 feet on the 30th.

Dense fog occurred along the coast on the 25th, and at scattered places in the State on the 24th and 29th. Thunderstorms occurred at Hammonton, Lambertville and New Brunswick on the 8th. Sleet was recorded on the following dates: 4, 5, 7, 8, 15, 16 and 19.

ERRATA.

December 1930. Long Valley, lowest temperature should be 2° on the 25th. Little Falls, highest temperature should be 54° on the 18th. Elizabeth, monthly mean temperature should be 34.6°. Belleplain, mean maximum temperature should be 43.2° and the monthly mean should be 32.6°. Boonton, monthly precipitation should be 2.57 inches.

COMPARATIVE DATA FOR MARCH

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	**30.4**	66	2	**1.10**	2.29	**0.23**	......	......	......	......	......
1886	37.7	70	9	3.70	5.27	2.59	......	......	......	......	......
1887	37.7	61	8	3.34	5.45	2.19	......	......	......	13	10
1888	32.8	72	0	5.71	8.22	3.75	......	......	......	12	11
1889	40.5	67	**19**	3.79	6.49	1.98	......	......	......	13	8
1890	37.6	78	0	6.08	7.92	4.14	......	......	......	13	14
1891	37.2	68	4	5.06	8.02	2.05	......	8	10	13	12
1892	34.4	64	6	4.75	7.21	3.11	......	10	12	9	9
1893	37.0	68	6	3.73	6.26	2.36	.....	10	10	11	10
1894	44.2	83	12	1.77	2.65	1.09	....	12	11	8	10
1895	36.7	72	7	3.16	4.66	1.77	4.0	12	8	11	10
1896	34.0	69	−8	5.34	7.38	3.14	13.2	13	8	10	11
1897	40.0	77	18	2.78	4.32	1.55	1.6	11	9	11	10
1898	45.1	77	16	3.33	4.25	2.56	3.0	9	10	12	12
1899	38.6	73	13	6.54	9.58	3.45	5.4	7	10	14	13
1900	35.6	67	−9	3.51	4.96	2.48	7.0	12	12	7	10
1901	39.2	75	−8	4.64	8.07	2.40	0.9	9	10	12	12
1902	43.9	77	0	4.34	7.20	3.16	5.7	12	10	9	11
1903	47.6	79	13	5.13	8.53	3.60	*T.*	11	8	12	10
1904	37.2	72	1	3.43	4.76	2.02	4.5	11	8	12	13
1905	39.8	87	−7	3.95	5.06	2.80	2.6	14	8	9	12
1906	34.4	62	**−15**	5.09	6.77	2.91	11.2	10	9	12	11
1907	41.2	88	−11	3.04	4.38	1.81	11.5	13	10	8	10
1908	41.8	89	7	2.80	4.92	1.06	3.5	11	9	11	12
1909	38.3	74	−6	3.48	4.66	2.31	4.6	12	10	9	13
1910	44.5	88	10	1.22	2.36	0.29	1.1	14	10	7	6
1911	37.6	76	3	3.38	4.50	2.64	5.3	10	12	9	11
1912	36.9	72	3	**7.61**	**9.61**	5.95	6.6	9	11	11	14
1913	44.8	79	1	5.15	7.73	2.47	0.1	10	9	12	12
1914	35.4	75	−6	3.65	6.45	2.02	**20.5**	13	10	8	10
1915	36.1	63	11	1.13	**1.65**	0.58	7.4	20	7	4	3
1916	31.7	71	−7	3.48	4.96	2.38	19.3	13	8	10	12
1917	38.2	72	0	4.65	7.14	2.28	9.8	12	8	11	13
1918	41.8	82	8	2.06	3.76	0.99	0.7	17	7	7	9
1919	43.2	77	12	5.32	7.40	3.77	1.6	14	7	10	13
1920	39.4	79	−8	3.80	5.36	2.29	5.6	17	5	9	10
1921	**49.1**	**92**	11	3.03	4.65	1.80	*T.*	14	10	7	11
1922	41.1	82	2	4.52	7.10	3.42	3.7	12	6	13	13
1923	38.0	81	−3	4.09	6.73	2.13	6.3	17	6	8	10
1924	38.8	76	5	2.51	5.69	0.80	2.7	16	6	9	8
1925	43.3	80	1	3.47	6.09	1.50	0.3	16	6	9	9
1926	35.1	79	0	2.25	3.15	1.52	0.4	16	9	6	7
1927	41.9	81	9	1.46	2.73	0.78	0.3	14	7	10	10
1928	38.3	82	6	2.84	3.82	1.70	4.9	14	8	9	10
1929	44.9	81	5	3.07	4.92	1.92	0.7	15	6	10	11
1930	40.0	78	9	2.54	3.80	0.44	0.1	16	7	8	7
1931	39.2	64	12	4.14	6.06	2.60	2.0	8	9	14	10
Normal	38.5	......	......	3.34	......	......	4.8	12	9	10	11
Extremes	......	92	−15	......	9.61	0.23	......	......	......	......	......

W. B. O. Philadelphia 4-22-31-830.

Climatological Data for March, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	38.5^{c}	+0.4	63	27	22^{c}	2	34^{c}	3.07	−0.78	1.70	T.	7	12	5	14	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	37.2	+1.4	59	27	19	22	33	4.55	+0.35	1.47	8.8	13	12	6	13	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	......	......	16	3	....	3.15	−0.32	1.10	8.9	12	8	8	15	nw.	Brice E. Riker.
Dover	Morris	600	47	37.4	+2.2	58	27	21	20	29	4.12	+0.13	1.77	3.5	10	3	16	12	......	William C. Harris
Layton	Sussex	480	30	35.6	0.0	61	27	14	3	40	2.60	−0.77	0.96	2.8	10	9	3	19	ne.	A. M. Depue.
Long Valley	Morris	520	1	37.2^{b}	......	58	27	22	3	30	3.56	....	1.89	2.0	7	9	11	11	w.	S. N .Dilts.
Newton	Sussex	769	47	36.7^{a}	+1.2	63	23	18	3	30	2.83	−0.74	1.05	4.0	9	6	5	20	ne.	Irving J. Kern.
Phillipsburg	Warren	363	§48	39.2	+1.1	62	27	25	3	30	2.65	−0.89	1.32	T.	7	11	8	12	......	Town Engineer.
Sussex	Sussex	442	36	37.5^{a}	+1.2	60	24	20	3†	36	3.07	−0.52	1.18	0.2	11	8	4	19	nw.	A. J. W. Mowatt
Means and extremes	....	......	....	37.4	+1.1	63	23†	14	3	40	3.29	−0.48	1.89	3.4	10	9	7	15	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	41.6	+2.1	59	24	30	2†	22	4.01	+0.01	2.00	0.2	8	5	11	15	ne.	William Mann.
Boonton	Morris	400	§41	38.8	......	63	26	22	7†	29	3.44	−0.50	1.66	......	8	11	4	16	ne.	John Kline.
Canoe Brook	Essex	173	1	37.4	......	59	27	18	3	33	4.22	....	1.89	......	8	9	12	10	ne.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	......	......	......	......	....	6.06	+2.32	2.38	T.	8	11	9	11	... .	Paul Molitor, Sr.
Elizabeth	Union	45	52	41.1	+2.3	61	27	27	14	27	4.25	+0.03	1.61	T.	11	12	8	11	nw.	Union County Park Com.
Flemington	Hunterdon	140	§45	40.4	+0.3	61	27	24	3	29	3.24	−0.65	1.63	1.0	9	15	4	12	e.	Hiram E. Deats.
Jersey City	Hudson	10	33	40.5	+1.3	60	27	29	2†	23	4.79	+0.64	1.85	1.0	10	6	14	11	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	44	38.2	......	58	27	23	3	23	3.53	−0.50	1.60	2.0	12	11	6	14	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	39.7	+1.7	63	27	22	3	30	3.97	+0.38	1.66	1.0	9	10	9	12	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	78	39.6	+0.8	58	27	26	3	24	3.49	−0.32	1.64	T.	9	7	15	9	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	3.60	....	1.21	......	7	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	41.1	+2.3	64	28	26	5†	33	3.92	−0.46	1.45	T.	9	10	10	11	nw.	Vincent A. Messineo.
Plainfield	Union	120	43	39.4	+0.6	60	27	24	22	27	4.50	+0.23	1.69	0.4	10	7	10	14	nw.	S. K. Pearson.
Ridgefield	Bergen	80	14	39.2	......	61	27	24	3	26	4.26	....	1.60	3.7	9	3	11	17	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	39.4	+1.2	61	27	24	22	30	3.41	−0.55	1.57	0.4	8	7	5	19	nw.	Julius Gerlich.
South Orange	Essex	200	59	......	......	......	......	......	......	....	4.35	+0.49	1.63	......	8	....	....	....	......	Everett W. Bird.
Verona	Essex	490	5	37.6	......	58	27	24	3	23	4.83	....	2.14	3.7	13	4	10	17	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	4.09	....	1.29	......	11	....	....	....	...	Hackensack Water Co.
New York, N. Y.	....	365	61	40.5	+2.8	60	27	29	11	22	4.74	+1.10	1.83	1.0	11	4	8	19	nw.	U. S. Weather Bureau.
Means and extremes	....	......	....	39.6	+1.4	64	28	18	3	33	4.09	+0.05	2.38	1.0	9	9	9	13	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	38.5^{a}	−2.6	63	25	12	14	37	5.44	+1.74	1.36	4.5	14	5	4	22	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	48	40.7	−1.6	64	25	26	11†	25	6.01	+1.83	2.20	1.6	12	7	10	14	sw.	Bennett K. Matlack
Burlington	Burlington	12	§45	40.8	+0.4	61	27	26	2†	25	4.51	+0.80	1.80	T.	10	6	9	16	ne.	Public Service Power Co.
Clayton††	Gloucester	134	31	39.2	−2.5	62	27	24	14	28	4.08	+0.50	1.54	T	12	10	10	11	nw.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§25	40.2	......	61	25†	25	3†	28	4.43	+0.84	1.69	1.1	9	8	11	12	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	38.6	−1.8	60	27	23	3	30	4.41	+0.37	1.94	1.5	9	8	7	16	nw.	Charles Welsh.
Imlaystown	Monmouth	115	38	39.7^{b}	+0.6	58	27	25	3	29	4.01	−0.07	1.57	1.0	12	3	12	16	nw.	Carlton Lawrence.
Indian Mills‡‡	Burlington	76	42	40.0	−0.5	60	8†	21	14	29	5.16	+1.13	1.90	3.0	10	5	11	15	nw.	James M. Armstrong.
Lakewood	Ocean	54	27	39.2	−0.4	55	26†	25	3†	22	4.83	+0.85	1.80	T.	11	8	5	18	ne.	R. W. Holman.
Moorestown	Burlington	......	68	39.8	+0.6	59	27	26	11†	24	3.44	−0.32	1.35	1.5	8	7	6	18	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	5.02	+1.53	1.61	4.2	13	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	40.4	......	60	27	26	14	27	3.59	....	1.64	T.	11	9	7	15	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	39.0	......	58	26	21	14	25	5.60	+2.13	1.40	......	13	11	10	10	ne.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	38.9	......	60	27	19	22	30	3.84	....	1.68	......	8	10	14	7	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	39.7	+0.6	59	27	26	3	22	3.24	−0.16	1.57	0.2	12	4	8	19	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	......	......	......	......	....	4.01	....	1.72	1.7	8	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	40.6	+0.6	58	28	22	13	24	5.18	+0.93	1.92	0.2	11	10	2	19	ne.	John H. Brown.
Philadelphia, Pa	....	117	60	42.3	+1.5	61	27	29	11	21	3.97	+0.58	1.40	0.8	12	3	9	19	nw.	U. S. Weather Bureau.
Means and extremes	....	......	....	39.7	−0.4	64	25	12	14	37	4.54	+0.89	2.20	1.5	11	7	8	16	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	40.5	+1.5	59	24	20	15	20	3.14	−1.09	1.85	T.	9	18	7	6	ne.	Information Bureau.
Atlantic City	Atlantic	16	58	40.0	+1.4	57	29	27	11	21	5.19	+1.59	1.21	2.2	15	5	7	19	w.	U. S. Weather Bureau.
Cape May City	Cape May	17	47	40.5	−0.3	57	25	28	11	20	5.92	+2.19	2.14	7.3	16	4	11	16	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	39.2	+0.7	55	29	28	11†	20	4.64	+0.30	2.03	0.7	13	4	9	18	nw.	William D. Martin.
Sandy Hook	Monmouth	22	33	39.6	+2.6	54	27	30	11	16	3.94	−0.10	1.78	0.1	11	7	7	17	nw.	U. S. Weather Bureau.
Means and extremes	....	......	....	40.0	+1.2	59	24	20	15	21	4.57	+0.58	2.14	2.1	13	8	8	15	nw.	
For the State	....	......	....	39.2	+0.7	64	25†	12	14	40	4.14	−0.30	2.38	2.0	10	8	8	15	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T. precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for March, 1931

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
elvidere	Delaware	.10			T.				.70	T.	.02									*	.55					T.			*	1.70			3.07
harlotteburg	Passaic	.05			.03	.10			1.45	.21	.24						.02			.03	.41					.43	.01	.10	*	1.47			4.55
ulvers Lake	Delaware	.05			T.	.10	.01		.62	.43	T.	T.		T.			.02			.11	.23					.45	.03		.08	1.02	T.	T.	3.15
over	Passaic	.11			.11				1.32								.05			*	.45				*	.31			*	1.77			4.12
ayton	Delaware	.04			.04	T.			.73	.06		T.	T.	T.			.01			*	.35					.41	T.		.15	.81			2.60
ong Valley	Morris	.13			T.				.95	.09										T.	.23				.27				.02	1.87			3.56
ewton	Delaware	.06			.04	.03	T.		.77	T	T.						T.			.40	.06					.29	T.		.13	1.05			2.83
hillipsburg	...do	.13			T.				.55	T.	T.		T.			T.	T.			.43					.02	.20			.43	.89			2.65
ssex	Hudson	.01		.09	.04				.79	.26										.02	.34					.28	.06		.15	1.03			3.07
The Red Sandstone Plain.																																	
ayonne	Coast	.50			*	.45			1.24	T.										*	.27								*	2.00			4.01
oonton ‖	Passaic		.02		T.	.08			.32	.75	T										.33					.27	.01			1.66			3.44
anoe Brook ‖	Essex	T.	.16		T.	.24			.70	.59	T.						T.				.28					.33	.03			1.89			4.22
hatham ‖	...do		.41			.36			.83	1.08	T.			T.			T.				.49	T.				.45	.06			2.38			6.06
izabeth	Coast	.17			.12	.12			1.46	.04	.01		T.							T.	.37					.33	.02		.08	1.53			4.25
emington	Raritan	.13			.02	T.			.98	T.							.01	.03		T.	.29					.15			.04	1.59			3.24
rsey City	Coast	.22			.25	.20			1.70	T.	T.	T.				T.	T.			.04	.29					.20	.04		.15	1.70			4.79
mbertville	Delaware	.19			.04	.02			1.00		T.		T.				.08	.14		.05	.21					.18	.02		.15	1.45			3.53
ttle Falls ‖	Passaic	.10			.01	.21			.77	.67											.32					.22	.01			1.66			3.97
w Brunswick	Raritan	.18	T.		.08	.04			1.06	T.	T.		T.				T.			T.	.33					.13	.03	T.	.04	1.60	T.		3.49
w Milford ‖	Hackensack		.14			.32			.33	.99											.33					.28				1.21			3.60
terson	Passaic	.11		.09					.98	.54							T.			.40					.25	.10			.40	1.05			3.92
ainfield	Raritan	.20			.25	.15			1.65		T.	T.					T.			.05	.20					.28	.03		.35	1.34			4.50
dgefield**	Hackensack	.19			.41				1.60	T.	.01	T.				T.				.05	.31				.02	.17	T.		T.	1.50			4.26
merville	Raritan	.16			.08	T.			1.18								T.	T.		.11	.18					.13	T.		.08	1.49			3.41
uth Orange	Rahway	.15			.12	.13			*	1.62											.33					.37				1.63			4.35
rona**	Passaic	.13			.25	.03			2.14	T	T.					.01	.01			.27	.06				.08	.23	.03		.60	.99			4.83
odcliff Lake ‖	Hackensack		.04	.08	.25	.25			.26	.99	.03										.59					.28	.03			1.29			4.09
w York, N. Y***	Coast	.20			.42	.03		T.	1.66	T.	T.	T.				T.	T.			.27	.06				.03	.20	.04		.64	1.19			4.74
The Southern Interior.																																	
lleplain	Tuckahoe	.85			.04				1.18		T.					.12	.33	.87		.08	.25		.09	.19		.02	T.		.05	1.36		.01	5.44
idgeton	Coast	.76							.90						.08		.67	1.53		.28	.05		.05	.16		.02			.05	1.46			6.01
rlington	Delaware	.28	.02		T.	T.		T.	1.38	T.			T.				.25	.17		.06	.40			T.		.15	T.		.10	1.70			4.51
yton	Delaware	.31			.04				1.03							.06	.66			.25	.05		.05	.05		.04			.20	1.34			4.08
mmonton	Mullica	.50	T.		.02	T.		T.	1.33	T	T.		T.			T.	.41	.20		T.	.27			T.		T.	.01		.07	1.62			4.43
ghtstown	Raritan	.22			.06	T.			1.44									.06			.44					.14	.11		.20	1.74			4.41
laystown	Monmouth	.27			.04	.11			1.25				T.				.07	.11		.06	.28					.08	.10		.07	1.57			4.01
lian Mills	Mullica	.57			T.	.09			1.22								.40	.32		T.	.70		T.	.03		.05	.06			1.72			5.16
kewood	Metedeconk	.45			.16	.06			1.55		T.		T.				.22	.05		T.	.30					.08	.06		.10	1.80			4.83
orestown ‖	Delaware	.20	.06						.80	.14								.48			.31	T.				.10		T.		1.35			3.44
rthfield	Coast	.80			.03				.86							.01	.32	.82		.03	.25		.04	.17			.02		.06	1.61			5.02
mberton		.41			.01	.01			.98		T.						.18	.02		.07	.15						.12		.07	1.57			3.59
asantville ‖	Coast	.46	.37		T.	.06			1.03	.19							T.	1.29			.38			.25	.03	.03	.06	.05	T.	1.40			5.60
nyon	Coast	.19			.04				1.30									.04			.45					.14			.05	1.63			3.84
nton***	Delaware	.26			.03	T.		.02	.67	T.	T.		T.				.22	T.		.27	.08				.05	.06	.01		.73	.84		T	3.24
nton No. 2 ‖	Delaware	T.	.24			.06			.83	.35	T.	T.	T	T			T.	.28			.41					.12	T.	T.		1.72	T.		4.01
kerton	Coast	.35			.21	.09			1.92								.70			.09	.22			.10			.05		.05	1.40			5.18
la., Pa***	Delaware	.33			T.			.06	1.11	T	T.		T			T.	.61	.09		.25	.01		T.		.04	.06	T.		.80	.60		.01	3.97
The Sea Coast.																																	
ury Park	Coast	.43			.34	.02				T.	.04	T.	T.				.01				.44						.01		.03	1.82			3.14
antic City***	...do	.74			.05			.19	.88							T.	.60	.65		.25	.14		.16	.17		.09	.04		.31	.87		.05	5.19
e May City	...do	.75	.02		.01				.87	.01						.05	.78	1.48		.08	.03		.20	.40		.22	.14		.08	.80			5.92
g Branch**	...do	.39		T.	.43			.03	1.52	.03	.01						T.			.06	.03				.02	.05	.04		.62	1.41		T.	4.64
dy Hook***	...do	.30			.34	.01		T.	1.09	T.	T.	T.	T.				T.			.19	.10				.03	.04	.06		.64	1.14			3.94

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
ervation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-
ion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
asurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
antic City	29.90	30.36	27	29.18	8	18.5	54	e.	8	77	66	73	36
g Branch	29.89	30.35	27	29.10	8					78	65	69	
orestown										73	62	68	
York, N. Y	29.90	30.37	27	29.16	8	15.6	51	nw.	5	69	57	68	51
ladelphia, Pa	29.92	30.40	27	29.17	8	14.3	36	e.	8	63	54	60	47
gefield	29.90	30.36	27	29.15	8								
dy Hook	29.87	30.34	27	29.13	8	16.5	50	e.	8	76	65	73	44
nton	29.91	30.38	27	29.14	8	12.1	38	e.	8	71	61	68	48
ona													

Daily Temperatures for March, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	47	44	40	42	40	40	40	41	41	35	40	44	45	50	48	41	50	....	....	52	56	51	58	61	47	....	63	53	50	44	50	46.9[c]
	Minimum	32	22	27	33	32	23	25	31	29	29	28	28	31	30	31	32	33	....	....	23	23	27	35	27	37	....	30	35	39	35	36	30.1[c]
Charlotteburg	Maximum	55	41	40	36	36	42	41	38	38	37	38	38	38	53	58	43	43	47	45	42	50	50	52	56	48	52	59	56	50	53	50	46.0
	Minimum	33	25	20	30	26	27	22	28	24	27	25	25	30	25	25	29	29	27	26	29	22	19	31	29	35	35	32	36	41	33	33	28.3
Dover	Maximum	44	41	41	36	39	43	40	39	39	37	49	41	41	49	45	37	46	51	40	44	54	45	55	56	45	55	58	46	54	46	51	45.4
	Minimum	29	25	22	31	28	30	23	28	28	27	26	26	31	26	29	30	30	28	27	21	37	23	34	27	36	37	33	31	38	39	34	29.5
Layton	Maximum	41	39	38	38	39	41	42	37	38	36	38	34	37	48	48	37	48	41	38	44	44	49	47	60	43	57	61	47	50	42	48	43.5
	Minimum	26	23	14	32	24	28	18	29	28	28	26	29	30	29	25	30	30	28	26	31	21	21	32	20	36	35	25	30	38	35	35	27.8
Long Valley	Maximum	51	44	40	35	....	....	40	38	38	35	38	39	39	47	45	36	46	49	40	42	53	46	54	55	45	55	58	54	51	44	49	45.1[b]
	Minimum	28	25	22	32	....	....	24	29	26	27	26	26	31	28	32	34	30	29	29	29	29	24	34	25	31	38	34	30	32	34	34	29.4[b]
Newton	Maximum	46	46	37	38	36	42	39	40	41	36	38	41	38	49	46	41	46	48	37	45	53	46	63	59	45	55	59	55	56	43	....	45.5[a]
	Minimum	33	20	18	30	26	26	21	27	26	26	24	24	29	25	27	28	28	26	27	29	29	26	32	29	37	35	29	30	35	32	....	27.9[a]
Phillipsburg	Maximum	42	42	39	43	42	46	39	42	40	37	40	43	40	48	46	39	49	50	41	43	54	48	56	58	48	59	62	44	53	45	49	46.0
	Minimum	34	29	25	34	32	32	28	33	30	30	28	29	33	32	33	34	34	31	33	34	28	29	36	28	39	38	34	36	39	37	37	32.5
Sussex	Maximum	53	40	38	39	37	40	41	38	40	38	....	39	37	45	47	42	47	46	41	44	53	50	55	60	53	53	58	58	50	45	47	45.8[b]
	Minimum	27	25	20	31	30	29	20	31	28	28	....	28	31	28	26	31	31	29	26	31	22	23	34	24	37	37	27	33	38	35	35	29.2[b]
The Red Sandstone Plain.																																	
Bayonne	Maximum	46	45	45	42	40	44	43	42	43	42	42	43	42	44	47	45	46	52	51	49	48	50	56	59	58	56	58	58	57	52	50	48.1
	Minimum	34	30	32	32	30	35	31	32	35	32	31	32	33	33	36	36	37	35	36	34	36	39	40	42	37	35	37	36	41	37	38	35.0
Boonton§§	Maximum	43	42	42	37	54	44	41	40	41	41	41	42	49	49	49	42	54	53	43	46	56	51	56	58	46	63	61	45	55	47	50	47.8
	Minimum	29	26	25	28	30	31	22	30	26	29	27	28	29	26	28	31	32	30	27	52	27	22	32	32	37	38	34	29	34	36	36	29.8
Canoe Brook§§	Maximum	43	42	41	36	41	45	38	41	44	38	40	42	42	50	45	40	45	50	45	46	53	47	53	56	48	56	59	55	48	46	49	45.9
	Minimum	27	27	18	30	30	30	22	31	26	29	28	28	30	24	28	32	33	26	24	32	21	22	33	23	38	39	31	28	37	35	35	28.9
Elizabeth	Maximum	52	44	41	43	42	46	47	46	47	40	43	43	45	54	48	44	47	54	49	47	54	52	54	59	50	57	61	53	58	51	49	49.0
	Minimum	34	29	28	33	31	31	29	33	30	30	29	29	35	27	34	34	34	31	31	33	31	29	37	38	41	40	38	36	40	36	37	33.2
Flemington	Maximum	59	48	41	41	45	50	45	43	44	43	47	49	50	55	48	41	51	55	53	47	59	47	55	57	47	58	61	56	55	48	50	49.9
	Minimum	31	26	24	33	30	32	26	30	28	30	26	27	31	30	30	32	29	30	31	32	30	26	35	30	38	39	35	31	39	34	35	31.0
Jersey City	Maximum	45	42	44	38	40	42	42	47	42	42	41	42	41	50	47	44	42	51	49	48	52	49	54	59	51	52	60	46	54	47	50	46.9
	Minimum	39	29	30	31	31	33	29	34	32	30	29	30	31	30	35	36	33	32	35	33	35	38	39	39	41	37	37	36	41	36	37	34.1
Lambertville	Maximum	45	42	41	41	41	43	41	45	40	35	38	41	45	47	45	38	47	50	46	42	52	45	53	55	46	56	58	46	53	44	46	45.4
	Minimum	38	25	23	33	25	28	31	35	28	28	25	26	29	28	29	32	31	29	33	32	29	29	34	34	38	38	34	32	38	34	35	31.0
Little Falls§§	Maximum	43	46	42	37	42	45	43	41	45	40	43	44	43	54	48	46	46	52	44	48	56	48	55	60	48	57	63	52	57	52	53	48.1
	Minimum	32	28	22	32	31	30	24	31	31	30	28	29	32	26	30	33	33	38	27	32	28	25	36	30	37	38	34	32	37	37	38	31.3
New Brunswick	Maximum	54	46	42	41	43	45	42	49	46	39	41	43	45	47	45	39	46	51	48	45	51	49	53	54	50	56	58	53	54	50	46	47.5
	Minimum	34	28	26	33	31	32	27	32	30	30	27	28	32	28	31	33	33	29	31	32	27	28	35	34	38	39	36	33	38	34	35	31.7
Paterson	Maximum	43	45	42	44	59	54	55	45	45	42	41	41	42	41	44	52	45	45	54	50	47	55	56	61	50	59	63	64	56	51	52	49.8
	Minimum	29	36	28	27	26	31	33	29	30	26	34	32	32	28	29	29	34	31	32	33	39	27	29	35	42	38	38	35	40	35	38	32.4
Plainfield	Maximum	45	44	44	37	40	44	42	46	41	41	42	42	41	49	46	44	43	52	49	54	52	49	55	59	51	52	60	47	54	48	50	47.2
	Minimum	31	28	25	34	31	31	28	33	30	27	27	28	28	27	29	33	33	30	33	33	27	24	37	32	40	39	36	38	38	35	36	31.6
Ridgefield	Maximum	41	45	42	36	40	45	41	46	42	43	42	45	42	50	43	42	45	51	45	46	53	47	54	57	46	56	61	41	55	47	49	46.4
	Minimum	34	27	24	31	30	29	25	32	32	30	28	29	34	27	30	33	33	30	30	32	32	29	36	33	38	39	35	34	39	37	37	31.9
Somerville	Maximum	46	45	43	39	44	47	41	45	45	40	44	45	47	51	47	40	50	53	46	46	55	49	54	58	50	59	61	42	56	49	49	47.9
	Minimum	32	26	25	33	31	32	25	33	28	30	27	28	32	28	29	33	34	29	28	33	25	24	36	33	39	39	33	30	40	33	34	31.0
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Verona	Maximum	43	40	40	35	39	42	39	40	41	38	39	40	40	46	44	38	43	48	43	43	50	37	52	54	45	54	58	40	54	45	47	43.8
	Minimum	35	27	24	31	29	30	26	31	29	28	27	27	29	27	31	31	32	29	30	32	32	31	35	36	36	37	35	33	38	35	36	31.3
New York, N. Y.	Maximum	45	43	44	37	40	43	42	46	42	41	41	42	41	50	46	43	43	51	49	45	52	49	55	58	51	53	60	45	53	48	49	46.7
	Minimum	38	29	31	31	31	33	29	34	32	30	29	30	31	30	35	35	33	33	35	33	37	38	39	40	41	38	38	35	41	36	37	34.3
The Southern Interior.																																	
Belleplain	Maximum	45	46	40	40	47	48	45	57	46	40	41	42	51	49	47	38	46	48	45	42	....	53	51	52	63	60	58	46	56	48	50	48.0
	Minimum	31	25	22	31	28	27	25	35	31	26	23	26	35	12	27	32	29	25	26	31	....	23	33	28	32	38	31	33	38	31	34	29.0
Bridgeton	Maximum	40	42	43	43	46	47	53	56	45	38	39	42	50	49	48	38	45	48	47	43	54	45	54	58	64	60	61	52	53	48	50	48.4
	Minimum	34	28	28	33	32	31	50	37	32	29	26	28	29	26	32	31	30	27	32	33	30	31	35	33	40	40	36	36	40	37	36	33.0
Burlington	Maximum	47	47	44	42	44	47	46	58	43	41	40	43	48	49	48	39	48	51	50	44	53	53	53	58	52	58	61	57	55	48	46	48.8
	Minimum	34	26	27	35	32	31	26	36	30	31	27	30	32	28	35	31	32	32	35	33	30	37	28	34	40	40	36	36	41	38	38	32.9
Clayton	Maximum	43	41	39	43	44	47	43	56	42	34	39	41	48	51	45	36	47	50	48	43	55	45	51	58	59	58	62	43	54	49	49	47.2
	Minimum	36	27	26	28	29	29	28	34	30	29	26	28	30	24	29	30	30	30	30	32	28	29	35	31	40	39	34	35	38	36	36	31.2
Hammonton	Maximum	53	45	41	41	45	48	44	59	45	40	41	42	50	50	45	38	48	51	51	44	55	50	52	58	61	59	61	43	54	50	50	48.8
	Minimum	36	27	25	34	32	29	28	34	31	29	26	29	31	25	30	32	30	30	31	33	29	27	36	30	40	40	33	32	42	36	36	31.7
Hightstown	Maximum	46	45	38	39	42	45	41	55	47	38	40	43	46	48	44	38	47	50	45	44	54	45	52	54	54	57	60	53	54	46	46	46.5
	Minimum	35	26	23	33	32	31	24	34	30	30	27	28	32	26	28	33	32	29	28	33	25	25	35	25	38	40	30	32	40	35	36	30.8
Imlaystown	Maximum	52	44	44	...	42	44	42	56	52	....	40	42	47	50	46	40	46	50	48	44	51	49	52	54	55	57	58	50	54	51	46	48.5
	Minimum	33	27	25	...	29	21	26	27	29	....	26	28	30	27	28	34	32	29	30	32	27	28	36	30	40	38	32	31	40	35	37	30.9
Indian Mills	Maximum	51	45	43	39	45	48	45	60	46	40	40	42	48	49	45	40	49	50	50	43	54	45	52	57	60	57	60	49	54	50	48	48.5
	Minimum	45	30	25	34	32	38	25	34	28	29	25	28	29	21	30	32	31	30	28	32	25	25	36	32	40	40	35	31	41	35	36	31.4
Lakewood	Maximum	43	42	40	40	42	45	39	51	47	39	41	42	48	45	43	39	45	52	47	45	50	44	54	50	54	55	55	45	55	48	47	46.2
	Minimum	34	28	25	33	32	32	26	35	30	31	27	29	32	25	27	34	33	30	31	33	29	26	38	34	41	40	85	32	41	35	37	32.1
Moorestown	Maximum	45	43	41	42	44	46	39	55	46	38	41	42	47	48	45	37	48	50	48	43	53	46	54	57	51	57	59	45	54	48	46	47.0
	Minimum	35	27	27	34	32	31	29	35	31	30	26	29	32	26	28	33	31	31	33	33	31	30	37	33	40	40	35	35	39	37	37	32.5
Pemberton	Maximum	52	44	40	40	43	46	44	58	45	40	40	42	48	48	46	38	49	52	48	44	55	46	53	55	58	58	60	44	55	48	46	47.9
	Minimum	36	28	28	35	32	32	27	35	40	31	27	29	33	26	30	34	33	30	32	34	28	28	37	32	41	42	34	33	41	37	38	33.0
Pleasantville§§	Maximum	43	47	39	40	46	48	43	51	48	40	42	43	50	46	46	39	44	51	43	44	49	43	50	49	55	58	53	57	56	50	50	47.2
	Minimum	31	28	23	31	32	28	30	34	33	27	25	29	28	21	29	37	32	28	28	32	26	25	37	29	30	41	35	35	43	34	35	30.8
Runyon	Maximum	54	47	44	44	44	42	47	50	48	49	50	49	47	51	42	41	44	55	46	47	52	35	54	50	54	54	60	42	58	48	50	48.6
	Minimum	26	24	24	26	28	30	20	36	32	29	26	27	31	22	26	30	28	28	26	27	22	19	36	26	40	30	38	38	38	35	36	29.2
Trenton	Maximum	45	42	40	42	43	44	41	55	44	36	38	42	45	48	44	38	49	50	47	45	55	44	52	54	51	57	59	43	54	45	48	46.5
	Minimum	37	28	26	31	31	33	31	33	31	30	27	28	32	30	32	32	32	32	32	32	33	32	36	37	40	41	37	35	37	36	37	32.9
Tuckerton	Maximum	48	45	39	45	46	50	48	50	49	48	49	52	46	48	46	49	46	49	53	46	47	44	46	50	54	55	56	58	55	50	48	48.9
	Minimum	24	25	35	30	30	28	32	35	36	36	34	35	22	28	32	30	33	29	34	31	28	26	34	30	40	38	35	36	40	38	36	32.3
Philadelphia, Pa	Maximum	48	45	43	44	46	47	42	54	44	40	40	43	49	49	45	40	50	51	49	45	55	47	56	61	55	59	61	46	53	48	48	48.5
	Minimum	40	32	31	36	35	36	35	36	35	31	29	32	34	33	34	35	33	34	35	35	36	37	39	40	43	43	40	39	41	40	40	36.1
The Sea Coast.																																	
Asbury Park	Maximum	42	45	40	40	43	45	44	46	46	44	40	42	47	43	42	41	45	52	50	48	46	45	52	59	56	54	57	45	58	56	47	47.1
	Minimum	35	31	32	30	31	33	31	36	32	31	30	30	32	29	30	36	35	35	34	34	34	33	38	39	40	40	39	37	41	36	38	33.9
Atlantic City	Maximum	43	45	39	42	45	47	40	49	45	38	41	42	49	41	42	40	41	52	42	43	46	41	48	45	52	56	49	45	57	48	45	45.0
	Minimum	41	30	33	34	33	34	35	39	36	30	27	31	31	29	38	35	32	31	36	34	32	38	37	34	41	42	38	39	37	37	39	34.9
Cape May City	Maximum	45	44	40	43	46	48	46	54	47	39	40	43	49	44	45	39	40	44	42	43	51	42	47	51	57	56	55	46	54	49	47	46.8
	Minimum	40	31	31	36	34	35	36	36	35	31	28	31	32	29	36	33	32	33	34	34	31	35	36	33	40	41	38	40	39	38	37	34.7
Long Branch	Maximum	42	44	40	38	41	45	37	45	44	40	41	41	44	42	42	41	45	52	42	46	50	42	50	48	43	53	54	42	55	50	47	44.8
	Minimum	36	30	30	33	31	29	29	34	31	31	28	30	32	28	30	35	34	32	33	34	32	30	39	38	40	39	37	36	40	37	39	33.5
Sandy Hook	Maximum	41	42	40	38	40	43	37	46	43	38	41	42	43	45	43	41	43	49	41	44	49	44	48	51	44	51	54	42	52	46	44	44.1
	Minimum	38	32	31	33	32	34	32	35	33	32	30	30	33	31	35	36	36	34	34	34	37	35	38	39	40	40	38	36	41	37	40	35.0

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	†
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. • Measurement included in next followin record. ••Observations taken in the morning, and entered on preceding day. † Pan frozen.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVI. APRIL, 1931. No. 4

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The course of the temperature was quite even during the month. Daily averages remained close to the daily normals, except along the seacoast where they ranged consistently a little above them. The highest recorded during the month were mostly in the seventies and occurred on the 20th and 21st, except along the coast section where they were observed on the 18th. The lowest were generally in the twenties with nearly all stations experiencing freezing temperatures. Some of the lowest were observed on the 12th and 13th, but more generally they happened on the 30th.

The precipitation was mostly during the first and third decades, the main dates being the 1st-2d, 4th, 6-8th, and 11th, then on the 23d, 26th, and 29th. The average for the State was about three-quarters of the normal amount; the deficiency was most marked in the coast region. Traces of snow occurred at about one-half of the stations in the northern portion, while there was no snow in the south.

No material damage by wind or hail was reported. Killing frosts were general and occurred at about the normal date for the last of Spring, but the aggregate damage was apparently small. The dry weather during the second decade, together with the prevailing low humidities, furnished conditions for the development of forest fires which began about the 13th and lasted to the 20th. One life and considerable property loss (at present unestimated) resulted.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 41 stations, was 49.8°, which was 0.4° above normal. The highest temperature was 80° at Paterson on the 18th, and at Hightstown and Indian Mills on the 21st, and the lowest, 20°, at Belleplain on the 30th. The greatest daily range of temperature was 50° at Layton on the 19th. The highest monthly mean temperature was 52.4° at Burlington, and the lowest, 46.4° at Layton.

The temperature departure from the normal for the year, 1931, to date, by sections, is: The Highlands, +1.7°; Red Sandstone Plain, +2.2°; Southern Interior, +1.1°; Sea Coast, +2.0.°

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 47 stations, was 2.85 inches, which was 0.91 inch below normal. The average total snowfall at 20 selected stations was a Trace. The greatest monthly precipitation was 5.17 inches, at Woodcliff Lake, and the least, 1.53 inches at Phillipsburg. The greatest amount of precipitation in any 24 consecutive hours was 1.89 inches at Ridgefield on the 22-23d.

The precipitation accumulated departure from the normal for the year, 1931, to date, by sections, is: The Highlands, —4.25 inches; Red Sandstone Plain, —3.33 inches; Southern Interior, —3.20 inches; Sea Coast, —3.74 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 62 miles per hour from the northeast at Atlantic City on the 1st.

MISCELLANEOUS.

The per cent of possible sunshine was 64, or 7 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.02 inches, or 0.02 inch above normal. The highest reading was 30.53 inches on the 12th at Trenton and Ridgefield, and the lowest 29.10 inches at Atlantic City on the 1st.

The mean stage of the Delaware River at Phillipsburg was 5.4 feet, and the highest 7.7 feet on the 1st and 2d. The mean stage at Trenton was 3.3 feet, and the highest 6.2 feet on the 1st. The normal stage at Trenton is 3.9 feet.

Thunderstorms occurred at scattered places in the State on the 1st and 11th, and at the majority of stations on the 26th. Dense fog was reported along the coast on the 1st and at Verona on the 1st and 2d. A little light hail occurred at Phillipsburg on the 6th and near Hammonton on the 23d. Light or heavy frosts occurred on numerous days throughout the month. Killing frosts were noted over nearly the entire State, with the exception of the southern coast, as late as the 30th. Sleet was recorded in scattered sections of the State on the 6th, 7th and 29th.

COMPARATIVE DATA FOR APRIL

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	48.4	88	26	2.79	2.86	0.89	......	......	......	......	......
1886	50.6	86	27	3.40	5.48	1.86	......	......	......	......	......
1887	47.3	87	16	2.70	3.77	0.91	......	......	......	12	7
1888	47.9	92	22	3.28	4.68	1.89	......	......	......	6	9
1889	51.2	83	25	5.32	7.25	2.92	......	......	......	14	12
1890	50.4	86	21	2.65	4.58	1.89	......	......	......	7	8
1891	52.0	88	20	2.19	3.80	1.39	......	13	11	6	8
1892	49.3	87	19	2.49	4.41	1.05	......	9	13	8	8
1893	49.2	82	19	5.21	7.12	2.97	......	9	10	12	11
1894	50.3	88	10	3.09	4.86	1.71	......	12	9	9	9
1895	49.1	89	19	4.88	7.75	3.47	T.	11	7	12	10
1896	52.4	**98**	12	**1.35**	2.30	0.64	3.1	13	10	7	7
1897	50.4	89	19	3.79	6.98	2.17	T.	14	11	5	9
1898	47.8	81	13	3.74	4.94	2.17	2.9	8	11	11	11
1899	49.9	88	18	1.73	3.25	**0.48**	T.	16	10	4	4
1900	50.8	82	18	2.29	3.03	1.59	T.	14	9	7	6
1901	48.3	89	23	6.31	**10.22**	3.46	0	8	7	15	12
1902	50.2	93	20	3.62	5.99	2.45	0	10	11	9	9
1903	50.9	92	18	3.97	7.03	2.40	0	13	7	10	9
1904	46.7	85	16	3.42	4.71	2.00	0.1	9	12	9	10
1905	49.9	84	18	2.88	4.03	1.53	0.1	12	11	7	10
1906	51.2	87	17	3.64	6.42	1.17	T.	15	10	5	8
1907	**45.2**	83	19	3.78	8.67	2.06	4.8	11	9	10	11
1908	51.2	93	13	2.72	3.86	1.42	T.	14	9	7	11
1909	50.2	88	17	5.97	8.90	3.84	0.8	10	11	9	13
1910	53.5	88	20	5.34	7.56	3.43	0	9	11	10	12
1911	47.4	88	14	4.11	5.58	2.87	2.6	10	10	10	11
1912	50.4	82	18	3.56	6.02	1.81	0	9	10	11	14
1913	52.1	89	19	5.78	8.53	4.14	T.	14	7	9	11
1914	48.4	89	16	3.67	4.78	2.35	0	13	10	7	11
1915	54.4	96	20	2.71	4.13	1.28	**11.5**	14	10	6	9
1916	48.2	85	21	3.32	6.14	0.90	4.4	10	9	11	13
1917	48.8	88	21	2.39	3.54	1.19	4.7	15	8	7	9
1918	49.8	81	22	4.05	5.79	2.88	2.6	11	8	11	12
1919	49.3	85	15	3.06	4.79	2.20	T.	13	7	10	10
1920	48.0	85	13	4.50	6.06	2.90	T.	12	9	9	13
1921	**56.3**	87	20	3.57	5.20	1.86	0.4	13	6	11	11
1922	51.0	89	18	2.55	4 12	1.57	T.	15	7	8	10
1923	50.0	91	**3**	3.55	6.59	2.27	0.5	16	6	8	9
1924	48.0	81	18	6.15	9.23	4.74	6.6	15	6	9	11
1925	51.4	88	15	2.40	3.35	1.31	0	15	7	8	9
1926	46.4	87	14	2.05	2.97	1.39	T.	13	10	7	8
1927	47.5	93	17	2.42	3.97	1.00	0.3	14	7	9	9
1928	47.4	85	16	5.26	7.16	3.82	0.9	12	8	10	12
1929	51.1	94	25	**6.43**	8.74	4.63	T.	10	5	15	15
1930	47.6	79	18	2.34	3.72	0.50	T.	13	7	10	9
1931	49.8	80	20	2.85	5.17	1.53	T.	15	6	9	9
Normal	4.94	......	......	3.76	......	......	1.3	12	9	9	10
Extremes	......	98	3	......	10.22	0.48	......	......	......	......	......

W. B. O. Philadelphia-5-26-31-830.

Climatological Data for April, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	50.3^{d}	+0.5	79^{c}	21	29^{d}	30	42^{d}	2.14	−1.52	0.57	0	8	17	5	8	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	47.4	+0.6	74	20†	27	16	44	4.59	+0.27	1.67	0	10	16	5	9	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	......	......	31	13†	...	2.46	−1.36	0.90	0.4	10	18	5	7	n.	Brice E. Riker.
Dover	Morris	600	47	48.3	+0.9	76	21	31	15†	40	3.60	−0.16	1.11	T.	11	10	11	9	......	William C. Harris
Layton	Sussex	480	30	46.4	−0.8	77	21	23	30	50	3.19	−0.42	1.53	T.	8	13	3	14	s.	A. M. Depue.
Long Valley	Morris	520	1	48.4	......	74	21	28	13†	41	2.26	......	0.78	0	8	16	7	7	se.	S. N .Dilts.
Newton	Sussex	769	47	48.9	+0.9	79	10†	26	12	42	2.87	−0.50	0.96	T.	7	14	1	15	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	50.4	+0.5	77	21	32	30	39	1.53	−1.73	0.40	0	10	15	6	9	......	Town Engineer.
Sussex	Sussex	442	36	48.6	0.0	79	20	27	12†	47	2.99	+0.45	1.10	T.	10	15	3	12	w.	A. J. W. Mowatt
Means and extremes	......	......	....	48.6	+0.4	79	10†	23	30	50	2.85	−0.73	1.67	T.	9	15	5	10	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	50.8	+1.3	69	20	34	28	25	2.23	−2.16	0.78	0	6	18	4	8	w.	William Manu.
Boonton	Morris	400	§41	49.7	......	79	22	29	30	42	3.02	−0.97	0.74	......	11	18	4	8	sw.	John Kline.
Canoe Brook	Essex	173	1	47.8	......	75	22	28	30	41	2.79	......	0.85	......	9	16	10	4	w.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	......	......	......	......	...	3.65	+0.45	0.84	0	12	17	6	7	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	51.8	+1.0	78	20	30	30	40	2.68	−1.00	0.77	0	12	16	8	6	nw.	Union County Park Com.
Flemington	Hunterdon	140	§45	51.1	+0.7	78	19†	28	30	43	2.21	−1.31	0.65	0	9	17	7	6	nw.	Hiram E. Deats.
Jersey City	Hudson	10	33	49.2	−0.8	71	20	34	12	29	3.07	−1.09	1.20	T.	7	13	9	8	n.	S. K. Pearson.
Lambertville	Hunterdon	430	44	49.6	......	76	21	30	30	34	2.35	−1.23	0.72	0	10	18	2	10	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	50.3	+0.4	77	21	31	12	39	4.61	+0.49	1.41	0	11	15	8	7	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	78	50.7	+1.1	75	20†	30	30	38	2.37	−1.37	0.69	0	7	15	9	6	se.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	4.48	......	1.12	......	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	50.8	+0.3	80	18	30	7	31	4.82	+1.26	1.75	T.	10	17	5	8	sw.	Vincent A. Messineo.
Plainfield	Union	120	43	49.6	0.0	77	20	30	12	42	2.78	−1.12	0.73	T	7	13	8	9	nw.	S. K. Pearson.
Ridgefield	Bergen	80	14	50.2	......	74	21	32	12	33	3.95	......	1.89	T.	9	14	7	9	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	49.6	+0.1	79	21	29	30	42	2.31	−1.18	0.70	0	10	16	1	13	nw.	Julius Gerlich.
South Orange	Essex	200	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Everett W. Bird.
Verona	Essex	490	5	48.8	......	75	21	31	12	30	3.57	......	1.10	T.	11	11	10	9	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	5.17	......	1.60	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	61	50.4	+1.0	69	18	34	12	26	3.30	+0.07	1.40	T.	10	10	8	12	u.	U. S. Weather Bureau.
Means and extremes	......	......	....	50.0	+0.5	80	18	28	30	43	3.30	−0.77	1.89	T.	9	16	6	8	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	48.4	−2.2	77	21	20	30	21	1.96	−1.69	0.90	0	8	12	4	14	nw.	A. F. Waldrou.
Bridgeton	Cumberland	30	48	51.2	−1.5	76	21	29	30	36	2.26	−1.26	0.97	0	7	17	2	11	se.	Beunett K. Matlack
Burlington	Burlington	12	§45	52.4	+0.6	79	21	32	30	39	2.86	−0.84	1.05	0	7	12	7	11	sw.	Public Service Power Co.
Clayton	Gloucester	134	31	50.4	−0.8	79	21	28	30	39	3.32	−0.16	1.85	0	8	18	4	8	nw.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§25	51.0	......	78	21	29	30	40	2.45	−1.47	1.03	0	7	19	3	8	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	50.2	−0.3	80	21	28	30	42	2.14	−1.77	0.58	0	6	15	6	9	w.	Charles Welsh.
Imlaystown	Monmouth	115	38	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Carlton Lawrence.
Indian Mills‡‡	Burlington	76	42	51.0	+0.7	80	21	25	30	42	2.83	−0.60	1.18	0	5	14	8	8	ne.	James M. Armstrong.
Lakewood	Ocean	54	27	49.6	+0.2	75	21	30	15†	40	3.06	−0.61	1.10	0	5	15	3	12	nw.	R. W. Holmau.
Moorestown	Burlington	......	68	50.1	−0.3	77	21	30	30	38	2.40	−0.89	0.86	0	8	12	7	11	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	2.23	−1.23	1.02	0	6	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	51.6	......	79	21	29	30	38	2.35	......	0.83	0	6	11	4	15	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	49.3	......	69	14†	25	30	36	2.33	−1.02	1.13	......	11	20	4	6	ne.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	49.2	......	78	18†	24	30	48	3.03	......	0.84	......	5	17	8	5	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	50.6	+0.8	76	21	33	12	31	2.07	−0.87	0.60	0	10	13	6	11	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	......	......	......	......	....	2.50	......	0.84	0	9	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	48.5	−0.8	70	18†	30	28	30	2.41	−1.33	1.40	0	7	15	0	15	ne.	John H. Brown.
Philadelphia, Pa	......	117	60	53.2	+1.1	76	19	37	12	26	2.05	−1.00	0.80	0	8	11	8	11	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	50.2	−0.4	80	21	20	30	48	2.51	−1.06	1.85	0	7	15	5	10	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	49.0	+0.5	67	11	34	8	30	2.62	−1.07	1.05	0	4	15	9	6	sw.	Information Bureau.
Atlantic City	Atlantic	16	58	49.3	+1.5	67	18	37	12	24	2.12	−0.87	1.10	0	9	13	7	10	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	47	49.4	+1.0	69	18	33	30	25	2.23	−0.76	0.64	0	12	12	7	11	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	50.4	+2.3	74	18	32	30	30	2.65	−1.90	0.84	0	9	14	3	13	s.	William D. Martin.
Sandy Hook	Monmouth	22	33	49.6	+2.6	70	18	37	12	24	2.38	−1.24	0.82	0	10	12	8	10	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	49.5	+1.6	74	18	32	30	30	2.40	−1.17	1.10	0	9	13	7	10	s.	
For the State	......	......	....	49.8	+0.4	80	18†	20	30	50	2.85	−0.91	1.89	T.	9	15	6	9	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for April, 1931

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
elvidere	Delaware	.57	.08					.40	.05			.15						T.						.47		T.	.38			.04			2.14
harlotteburg	Passaic	.57	.09		.03			.38	.20			.05												1.53			1.45	.22		.07			4.59
ulvers Lake	Delaware	.45	.09	.01	.01			.20	.05			.01						T.						.90			.72		T.	.02			2.46
over	Passaic	.73	.03	.06			*	.48		.03	.11													1.11		*	.99		T.	.06			3.60
ayton	Delaware	.45	T.	.02				.38	.02	T.	.06							.02	T.					1.53			.71			T.			3.19
ong Valley	Morris	.32	.02					.03	.27			.07						T.						.76			.78			.01			2.26
ewton	Delaware	.47	.04					.40	.08	.03								T.						.96			.89	T.	T.				2.87
hillipsburg	...do	.37	.03	T.	T.		T.	.21	.02			.09						T.					.15	.19		.05	.40			.02			1.53
ussex	Hudson	.31	.33		.03			.37	.09	.03		.08												1.10			.61		T.	.04			2.99
The Red Sandstone Plain.																																	
ayonne	Coast	.55	.03					.32		.07														.78			.48			T.			2.23
oonton ‖	Passaic	.15	.40		.03			.09	.25			.01												.74	.02		.24	1.07		T.	.02		3.02
anoe Brook ‖	Essex	.17	.46		.05			.29	.19	T.		.11												.85	T.		.21	.46		T.			2.79
hatham ‖	...do	.19	.46	T.	.07			.31	.55	.05		.14												.84	.12		.18	.68			.06		3.65
lizabeth	Coast	.65	.03		.02		.01	.42	.13	.01		.06												.77		T.	.53	.02		.03			2.68
lemington	Raritan	.65	.04		.05		T.	.27	.12			.06						T.						.37		T.	.61			.04			2.21
rsey City	Coast	.75			.02		T.	.54	.06	T.		.02						T.						1.20			.48		T.	T.			3.07
ambertville	Delaware	.72	.08				.02	.42	.03			.16						T.						.30		.05	.51			.06			2.35
ttle Falls. ‖	Passaic	.24	.82		.04			.40	.38	.02		.09												1.41	.12		.35	.74					4.61
ew Brunswick	Raritan	.69	.03	T.	T.			.56	.17			.05												.45		T	.42			T.			2.37
ew Milford ‖	Hackensack	.22	.53		.05			.41	.28			.06												1.12	.58		.28	.95					4.48
aterson	Passaic	.45	.60		.04			.65		.04														1.75		.01	1.27			.01			4.82
ainfield	Raritan	.70			.02		.05	.57				.05												.73		T.	.66		T.	T.			2.78
dgefield**	Hackensack	.61	.03	T.	.07			.68		.02		.05												1.89			.60		T.	T.			3.95
omerville	Raritan	.57	.01		.01		.02	.37	.08	T.		.12												.41			.70			.02			2.31
uth Orange	Rahway																																
erona**	Passaic	.90	.01		.00		.04	.48	.05			.06											.15	.73		.03	1 07		T.	T.			3.57
oodcliff Lake ‖	Hackensack	.21	.68		.08			.40	.34			.04												1.60	.67		.45	.70					5.17
ew York, N. Y***	Coast	.78			.02		.24	.32	.05	T.		.02						T.					.03	1.37		.04	.43		T.	T.			3.30
The Southern Interior.																																	
lleplain	Tuckahoe	.90			.03	.04	.09	.35				.07												.08			.40						1.96
ridgeton	Coast	.97			.08			.23	.05			.03												.29		T.	.61						2.26
rlington	Delaware	1.05	.03		T.			.67	.12			.04												.30	T.	T.	.65						2.86
avton	Delaware	1.85	.05				.09	.21				.02											.25			.27	.58						3.32
ammonton	Mullica	1.03	.01		T.		T.	.34	.01			.05												.21		T.	.80			T.			2.45
ghtstown	Raritan	.56						.42	.15			.07												.36		T.	.58						2.14
laystown	Monmouth																																
dian Mills	Mullica	.94					T.	.33	.10															.28		T.	1.18						2.83
kewood	Metedeconk	.97			T.		T.	.46	.14															.39		T.	1.10			T.			3.06
orestown ‖	Delaware	.49	.33					.30	.23			.01												.18			.10	.76					2.40
rthfield	Coast	1.02			.01		.06	.36				T.							T					.18			.60						2.23
mberton		.83						.28	09			.02												.38		T.	.75						2.35
easantville ‖	Coast	.85	.28		.01	.03	.01	.40	.04			.02												.08			.40	.21					2.33
nyon	Coast	.84						.82	.21															.59			.57						3.03
enton***	Delaware	.59	.01		T.		.18	.27	.04			.04											.25	.09		.02	.58			T.			2.07
enton No. 2 ‖	Delaware	.15	.69		T.			.25	.30			.05												.36	.01		.20	.49			T.		2.50
ckerton	Coast	1.40			.02		.03	.07				05												.22			.62						2.41
ila., Pa***	Delaware	.79	.01		T.		.13	.42				.03											.09	T.		.05	.53			T.			2.05
The Sea Coast.																																	
bury Park	Coast	1.05			T.			.58				T.												.04			.95			T.			2.62
antic City***	...do	1.05	T		.03		.29	.13	T.			.01							.01				.10	T		.05	.45			T.			2.12
pe May City	...do	.64	.02		.39	.02	.22	.25				.02							.02				.01	.24		.03	.47						2.23
ng Branch**	...do	.84					.18	.43				.05											.03	.56		.02	.53			.01			2.65
ndy Hook***	...do	.55	T		T.		.15	.36	.04	T.		.08											.04	.78		.01	.36			.01			2.38

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipi- tion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following asurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity, per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
antic City	30.03	30.52	12	29.10	1	17.9	62	ne.	1	74	64	71	60
ng Branch	30.03	30.52	12	29.12	1					66	56	61	
orestown										69	50	58	
w York, N. Y	30.02	30.54	12	29.21	1	16.1	54	nw.	29	64	52	61	68
iladelphia, Pa	30.04	30.55	12	29.16	1	14.8	46	ne.	1	61	44	50	65
igefield	30.02	30.53	12	29.20	1								
ndy Hook	30.00	30.49	12	29.16	1	15.3	50	ne.	1	72	59	69	64
nton	30.03	30.53	12	29.17	1	11.6	48	ne.	1	72	57	62	68
rona		30.52	12	29.21	1	8.5	37	w.	26	61	42	51	

Daily Temperatures for April, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	45	47	58	....	56	54	49	65	69	....	74	68	....	72	70	70	72	73	78	77	79	75	62	56	53	54	61	54	53	59	....	63.1[c]
	Minimum	36	41	32	....	34	40	39	35	41	....	38	31	....	43	33	36	36	47	36	40	....	48	42	34	34	36	39	34	42	29	....	37.5[d]
Charlotteburg	Maximum	50	47	56	55	48	51	47	59	66	71	67	65	70	68	65	67	69	66	72	74	74	69	65	51	51	59	58	51	53	50	....	60.5
	Minimum	34	39	35	40	32	38	35	33	36	32	43	28	30	50	28	27	30	32	28	30	35	40	37	32	28	43	34	32	38	32	....	34.4
Dover	Maximum	42	47	57	58	51	51	40	62	65	70	67	59	69	70	69	69	70	71	74	74	76	67	57	54	51	60	50	51	51	56	....	60.3
	Minimum	35	40	34	40	35	39	33	34	40	34	42	29	33	47	31	31	34	45	34	36	39	43	37	33	31	42	38	33	37	31	....	36.3
Layton	Maximum	41	47	52	54	52	46	46	47	69	73	62	60	72	68	68	69	69	68	75	76	77	70	54	54	52	64	56	55	51	53	....	60.0
	Minimum	34	40	29	39	26	37	36	35	33	31	42	27	25	39	27	24	28	43	25	32	33	40	36	29	27	43	37	28	35	23	....	32.8
Long Valley	Maximum	45	47	59	55	50	52	41	60	62	70	67	64	67	68	63	67	71	69	71	73	74	69	62	52	50	61	61	53	50	55	....	60.3
	Minimum	35	40	34	41	35	38	35	35	38	35	45	50	28	45	32	32	30	46	31	33	35	40	38	32	30	40	37	33	40	28	....	36.4
Newton	Maximum	42	46	54	56	49	56	49	59	71	79	68	57	73	67	67	68	78	70	75	76	77	79	60	54	52	62	65	54	52	54	....	92.3
	Minimum	31	37	29	39	32	35	32	32	40	37	41	26	31	44	33	33	39	42	36	42	43	44	35	30	31	41	35	31	35	29	....	35.5
Phillipsburg	Maximum	45	48	61	55	52	53	42	64	67	72	68	59	70	71	69	68	70	73	75	75	77	74	54	57	52	63	51	56	53	59	....	61.8
	Minimum	38	37	34	44	36	41	38	35	42	40	45	33	36	41	34	35	37	49	36	39	42	49	40	36	37	44	40	25	43	32	....	38.9
Sussex	Maximum	46	47	54	51	50	53	51	57	70	74	66	60	70	67	68	70	70	66	78	79	78	75	59	51	54	61	62	53	51	52	....	61.4
	Minimum	35	39	30	41	32	38	35	36	37	35	44	27	32	42	30	32	37	45	31	38	38	42	38	34	29	43	39	33	38	27	....	35.9
The Red Sandstone Plain.																																	
Bayonne	Maximum	49	57	57	59	58	54	52	63	62	62	60	59	62	64	67	65	63	64	68	69	68	60	58	54	55	59	58	51	56	56	....	59.7
	Minimum	42	38	38	44	43	42	38	40	40	41	38	35	37	42	47	45	44	44	53	53	52	45	42	37	39	44	40	34	43	39	....	42.0
Boonton§§	Maximum	47	48	58	64	52	55	44	64	67	71	71	59	72	72	67	68	72	70	72	74	76	79	63	55	54	68	53	59	63	60	....	63.2
	Minimum	35	37	31	41	33	39	38	35	38	33	45	31	30	42	32	34	32	46	33	34	37	40	40	34	30	43	40	36	37	29	....	36.2
Canoe Brook§§	Maximum	47	50	58	59	51	51	46	62	63	71	67	58	68	70	65	67	70	70	69	73	75	67	51	50	53	61	50	55	52	56	....	60.2
	Minimum	36	38	30	41	31	38	38	33	38	32	46	30	32	42	28	27	31	43	30	32	36	39	41	34	29	44	39	33	40	28	....	35.3
Elizabeth	Maximum	50	52	61	62	55	54	52	66	65	75	68	70	72	72	69	70	74	73	75	78	75	71	63	56	54	60	61	57	57	60	....	64.2
	Minimum	37	44	33	45	40	42	39	37	47	42	48	33	32	45	38	39	36	37	39	38	42	45	42	35	35	45	40	34	43	30	....	39.4
Flemington	Maximum	45	50	64	61	51	49	48	69	70	74	69	65	68	75	72	72	73	77	78	77	78	74	62	59	54	63	61	57	57	65	....	64.6
	Minimum	36	42	32	43	38	39	38	36	40	37	47	32	32	37	36	32	32	48	35	36	38	44	40	35	35	45	39	34	42	28	....	37.6
Jersey City	Maximum	48	51	57	61	54	51	44	63	66	63	66	60	67	70	66	66	68	70	70	71	70	60	54	54	53	60	50	54	53	56	....	57.6
	Minimum	38	41	37	45	41	40	36	36	48	45	40	34	38	46	42	45	44	48	51	50	48	51	40	36	42	44	40	35	41	37	....	40.7
Lambertville	Maximum	43	47	61	59	51	50	42	62	62	72	65	63	67	70	65	68	71	70	72	75	76	70	55	54	52	61	49	54	53	56	....	60.5
	Minimum	35	40	34	41	37	39	36	35	42	38	47	31	34	44	37	33	38	49	45	41	43	44	39	34	38	44	38	33	41	30	....	38.7
Little Falls§§	Maximum	48	51	59	60	51	52	53	64	68	68	69	61	71	72	70	71	71	73	73	76	77	68	51	57	54	63	53	55	55	59	....	62.4
	Minimum	36	39	36	43	34	41	38	35	42	35	46	31	36	47	34	32	34	48	36	37	40	43	42	35	32	44	40	35	41	33	....	38.2
New Brunswick	Maximum	45	50	61	60	52	49	49	62	63	73	66	67	68	70	69	66	72	71	70	75	75	72	57	55	55	62	65	55	56	57	....	62.2
	Minimum	36	43	35	45	39	42	38	37	43	40	48	32	33	42	38	36	36	49	39	37	40	45	42	35	35	44	40	35	42	30	....	39.2
Paterson	Maximum	50	52	61	60	53	53	50	59	68	69	63	52	51	70	69	57	78	80	74	72	61	62	65	60	63	53	58	43	50	47	.. .	60.1
	Minimum	35	37	36	44	36	38	30	37	44	40	35	48	37	49	48	38	54	64	43	42	45	46	44	35	36	45	40	36	44	35	....	41.4
Plainfield	Maximum	47	50	57	62	53	52	45	63	66	74	67	60	68	72	67	66	68	72	70	77	75	62	54	54	53	60	51	54	54	57	....	61.0
	Minimum	36	39	35	42	37	40	37	35	47	44	35	30	33	44	33	33	35	47	37	35	40	42	42	34	33	46	39	34	44	35	....	38.1
Ridgefield	Maximum	46	50	58	61	51	52	40	63	66	64	67	58	70	71	65	67	71	72	70	72	74	67	54	53	52	59	51	55	55	57	....	60.4
	Minimum	42	43	36	43	37	41	36	37	45	42	40	32	37	46	40	36	41	49	40	44	46	50	39	35	35	46	40	35	37	33	....	40.1
Somerville	Maximum	45	50	62	62	52	50	44	64	66	74	67	58	69	72	68	69	72	74	75	76	79	73	57	58	55	63	54	57	57	60	....	61.7
	Minimum	37	43	32	44	35	41	40	36	42	36	48	29	30	42	32	31	33	47	34	34	37	44	41	35	34	44	39	33	40	29	....	37.4
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Verona	Maximum	44	49	57	58	49	50	38	60	63	66	66	55	66	67	62	64	69	68	68	72	75	65	51	52	53	59	50	52	51	54	....	58.4
	Minimum	35	38	36	41	37	37	35	35	44	42	40	31	36	48	41	39	42	47	46	48	48	48	37	34	35	40	36	34	37	32	....	39.3
New York, N. Y	Maximum	47	50	56	60	52	51	43	62	64	58	64	58	65	68	64	64	67	69	68	68	68	60	52	52	52	60	49	52	52	55	....	58.3
	Minimum	38	41	37	46	41	40	36	37	49	46	42	34	39	47	44	47	44	49	54	52	50	52	39	36	42	44	40	35	41	37	....	42.6
The Southern Interior.																																	
Belleplain	Maximum	55	51	51	62	52	47	44	62	69	68	67	57	65	74	60	64	71	72	70	70	77	70	57	55	57	66	59	57	61	59	....	61.6
	Minimum	35	41	33	46	39	32	33	35	30	45	49	31	23	41	30	24	44	29	30	30	32	42	40	30	32	43	37	33	44	20	....	35.1
Bridgeton	Maximum	50	50	60	62	55	47	44	63	74	67	65	58	64	74	63	69	71	73	74	72	76	72	56	55	58	62	56	57	61	62	....	62.3
	Minimum	36	42	35	47	40	39	38	37	38	46	52	34	33	41	39	34	39	50	42	42	44	49	42	34	38	40	39	37	46	29	....	40.1
Burlington	Maximum	46	49	64	63	54	48	48	63	63	73	69	66	68	71	70	68	74	73	76	77	79	77	64	56	59	66	50	55	56	59	....	63.5
	Minimum	37	43	36	51	44	40	38	39	42	41	51	40	34	42	40	37	36	52	54	38	41	47	42	36	37	46	41	36	45	32	....	41.3
Clayton	Maximum	47	48	61	62	55	50	45	62	70	68	65	58	65	74	66	70	73	72	77	74	79	73	48	56	59	68	53	56	58	59	....	62.4
	Minimum	35	42	37	38	38	39	37	37	36	43	50	32	30	40	38	31	36	49	39	36	40	45	41	34	34	43	42	40	44	28	....	38.5
Hammonton	Maximum	51	51	64	62	53	47	43	61	64	71	65	63	67	73	68	67	73	72	75	74	78	73	59	55	61	66	69	57	59	60	....	63.4
	Minimum	36	41	35	47	38	40	38	37	37	41	50	32	33	42	35	31	38	63	39	34	40	42	41	35	33	45	38	30	39	29	....	38.6
Hightstown	Maximum	46	50	60	61	54	50	44	64	65	71	66	60	68	72	67	68	75	73	75	77	80	72	58	54	55	65	62	56	57	56	....	62.7
	Minimum	36	42	36	44	33	40	37	38	40	35	48	30	35	41	30	32	36	46	35	40	38	40	40	33	33	45	39	33	43	28	....	37.6
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Indian Mills	Maximum	46	50	64	63	53	47	47	63	64	72	66	66	70	71	68	68	74	71	76	75	80	74	60	55	60	66	67	57	58	60	....	63.7
	Minimum	36	42	36	47	40	41	38	36	36	44	50	33	28	39	33	36	34	50	36	33	40	44	42	35	34	45	39	30	45	25	....	38.2
Lakewood	Maximum	48	51	62	64	53	46	44	63	60	67	65	60	70	72	61	60	73	72	68	71	75	67	56	54	53	62	59	56	58	60	....	61.0
	Minimum	37	44	37	47	39	41	37	37	40	45	50	33	32	44	30	31	33	49	34	32	36	39	42	35	30	45	40	34	45	30	....	38.3
Moorestown	Maximum	48	49	63	63	53	48	44	62	64	71	68	56	69	70	65	67	73	71	75	76	77	72	46	54	56	62	49	55	56	58	....	61.3
	Minimum	36	40	36	46	40	39	38	38	42	40	47	33	34	43	38	33	39	51	43	39	41	46	37	34	37	42	37	33	35	30	....	38.9
Pemberton	Maximum	46	50	66	63	55	49	46	62	61	71	66	63	69	72	69	68	73	73	74	65	79	71	60	56	58	65	63	55	56	59	....	63.1
	Minimum	37	44	37	48	41	42	38	39	41	43	51	34	33	42	37	35	38	48	40	37	42	46	42	35	36	46	40	33	45	29	....	40.0
Pleasantville§§	Maximum	49	51	59	63	53	48	48	64	57	60	68	53	58	69	57	56	62	69	67	66	68	66	64	55	55	67	55	58	65	61	....	59.7
	Minimum	38	41	35	48	41	39	39	37	36	46	49	34	28	42	31	27	41	50	32	31	49	51	42	35	33	50	45	29	42	25	....	38.9
Runyon	Maximum	44	52	58	61	54	49	44	65	64	75	68	70	71	75	70	68	75	78	78	77	76	71	56	58	54	64	60	62	59	61	....	63.9
	Minimum	37	37	32	31	37	37	37	38	35	35	54	27	28	37	27	25	27	32	38	40	40	35	42	33	29	42	38	34	29	24	....	34.6
Trenton	Maximum	48	50	63	61	51	47	42	62	61	70	65	55	66	69	66	66	72	70	74	74	76	69	50	55	55	63	48	56	52	56	....	60.4
	Minimum	36	42	37	45	40	39	38	38	44	43	44	33	36	45	42	38	41	51	49	45	47	49	38	36	42	42	38	35	39	34	....	40.9
Tuckerton	Maximum	50	48	58	60	49	42	49	60	60	59	65	55	65	65	60	58	62	70	65	68	70	62	62	60	60	62	65	58	59	65	....	59.7
	Minimum	35	36	38	40	34	33	33	39	35	34	45	36	35	39	32	40	40	45	40	38	40	41	40	32	34	40	40	30	36	40	....	37.3
Philadelphia, Pa	Maximum	48	49	62	63	54	50	45	64	69	71	67	57	66	72	66	68	71	72	76	72	75	71	50	56	58	66	51	57	56	59	....	62.0
	Minimum	39	43	40	49	44	39	39	40	48	47	50	37	40	47	48	43	47	55	54	51	52	47	41	38	46	44	41	38	43	39	....	44.3
The Sea Coast.																																	
Asbury Park	Maximum	47	53	58	64	52	46	42	64	56	56	67	62	57	60	52	54	55	66	60	58	59	58	54	54	51	63	56	55	60	58	....	56.6
	Minimum	37	42	35	44	43	41	38	34	44	44	47	36	36	46	43	41	41	48	45	45	48	45	41	36	40	46	42	35	44	35	....	41.4
Atlantic City	Maximum	48	51	50	62	48	42	43	63	54	54	66	53	50	64	51	51	54	67	58	59	61	59	50	55	51	62	53	57	61	59	....	55.2
	Minimum	37	43	41	47	42	40	40	39	44	45	48	37	41	46	45	45	47	50	48	49	51	50	42	37	45	46	41	38	42	37	....	43.4
Cape May City	Maximum	51	51	54	60	50	43	42	61	58	56	68	52	54	67	56	59	57	69	63	62	64	62	52	54	55	64	53	59	61	58	....	57.2
	Minimum	39	41	40	46	42	40	40	40	42	45	47	36	38	43	39	36	42	48	44	40	48	44	40	38	44	47	42	42	41	33	....	41.6
Long Branch	Maximum	48	52	60	62	52	46	43	65	60	61	67	53	64	67	61	60	70	74	67	67	66	62	55	54	55	62	52	55	58	55	....	59.1
	Minimum	40	41	37	45	43	42	39	39	47	46	48	39	37	47	42	39	40	46	40	41	44	54	44	39	38	44	43	34	45	32	....	41.8
Sandy Hook	Maximum	47	49	57	58	49	47	42	58	56	58	62	50	62	67	63	58	68	70	63	63	62	60	51	52	51	59	51	53	53	57	....	56.5
	Minimum	38	43	40	44	43	39	39	39	45	44	46	37	39	47	44	43	44	50	47	47	49	48	41	38	43	45	41	38	42	40	....	42.8

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	*	.088	.154	.078	.090	.048	.040	.208	.144	.148	.160	.160	.016	.160	.192	.160	.160	.224	.192	.224	.224	.272	.128	.160	*	.194	.224	.192	.176	....	....	4.21
	Wind movement	121	91	127	77	111	175	124	65	113	157	83	62	103	60	69	55	110	57	57	76	96	210	184	75	87	174	133	137	109	74	....	317
Runyon	Evaporation	.040	.080	.100	.100	.110	.080	.060	.130	.120	.200	.210	.190	.190	.220	.220	210	.160	.225	.225	.220	.225	.200	.080	.080	.080	.100	.120	.200	.160	.140	....	4.47
	Wind movement	132	72	47	56	60	87	118	84	34	73	100	50	50	56	27	28	51	47	47	34	50	54	95	30	25	88	102	112	82	81	....	197

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. **Observations taken in the morning, and entered on preceding day. † Pan frozen.

51.0 5
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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVI. MAY, 1931. No. 5

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

So far as the State averages are concerned May was a normal month. The rainfall record, however, showed a wide variation in the amounts received, due to the local nature of the storms. The highest temperatures reached were in the low nineties in the Interior and the high eighties along the Coast; they occurred mostly on the 29th and 30th. The lowest were generally near the freezing point or a few degrees below it, and were registered on the 1st, except in the more extreme southern portion where they occurred on the 4th and 5th.

Light showers fell during the 2d and 3d, then an extended period from the 7th to 14th, inclusive, occurred, with moderately heavy rains in the north portion on the 8th. Moderate to heavy rains then came during the 21st to 23d, incl., and were followed on the 25th and the 26th by lighter showers. The month closed with light to heavy showers on the 31st. The greatest monthly totals were registered at stations in the northern portion, while the least were in the southern, especially near the sea coast. The range was from about 150% of normal in the former section to about 50% in the latter, the average for the State being about 98%.

A destructive hail storm occurred in Burlington County on the 10th. Hailstones as large as golf balls were reported and the total damage was estimated at $300,000. This was mainly to crops, but a large number of automobile tops and windshields were damaged as well as windows and greenhouse glass. Other storms occurred over the State, but the damage was minor.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 60.4°, which was 0.1° above normal. The highest temperature was 97° at Elizabeth on the 29th and 30th, and the lowest, 21°, at Layton on the 1st. The greatest daily range of temperature was 49° at Layton, Runyon and Sussex on various dates. The highest monthly mean temperature was 63.2° at Burlington, and the lowest, 57.2° at Long Branch.

The temperature departure from the normal for the year, 1931, to date, by sections, is: The Highlands, +1.5°; Red Sandstone Plain, +1.8°; Southern Interior, +0.8°; Sea Coast, +1.6°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 3.73 inches, which was 0.07 inch below normal. The greatest monthly precipitation was 6.33 inches, at Dover, and the least, 0.77 inch at Tuckerton. The greatest amount of precipitation in any 24 consecutive hours was 2.20 inches at Charlotteburg on the 7-8th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 12, or 1 more than normal.

The precipitation accumulated departure from the normal for the year, 1931, to date, by sections, is: The Highlands, —3.52 inches; Red Sandstone Plain, —2.87 inches; Southern Interior, —4.12 inches; Sea Coast, —4.30 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 11 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 40 miles per hour from the northeast at Atlantic City on the 13th.

MISCELLANEOUS.

The per cent of possible sunshine was 56, or 4 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 29.94 inches, or 0.05 inch below normal. The highest reading was 30.31 inches on the 1st at Trenton, and the lowest 29.55 inches at Long Branch on the 16th.

The mean stage of the Delaware River at Phillipsburg was 4.6 feet, and the highest 6.4 feet on the 15th. The mean stage at Trenton was 2.8 feet, and the highest 3.7 feet on the 14th and 15th. The normal stage at Trenton for the month of May is 2.6 feet.

Thunderstorms occurred quite generally throughout the State on the following dates: 7th, 8th, 9th, 10th, 11th, 12th, 20th, 21st, 22d, 23d, 30th and 31st. Dense fog was reported on the 2d, 3d, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 19th, 21st, 22d and 23d. Hail fell at Culvers Lake and Layton on the 8th, being reported as heavy at Layton. On the 10th hail was reported at Plainfield, Paterson and various other points in the northern sections of the State, it being heavy in some parts. A damaging hailstorm was reported from stations in Burlington County on the 10th. Killing frost was noted on the 5th at Flemington, but the latest date that killing frost occurred generally was the 4th.

COMPARATIVE DATA FOR MAY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	57.3	90	29	2.74	5.20	1.18	......	......	......	......
1886	58.8	87	**36**	6.07	8.46	4.15	......	......	......	......
1887	63.3	94	35	1.37	3.82	*0.08*	......	......	9	6
1888	58.6	90	26	4.92	6.48	3.00	......	......	18	16
1889	62.3	94	32	4.09	6.60	2.43	......	......	11	12
1890	60.7	87	33	4.24	7.17	2.60	......	......	11	12
1891	59.5	93	28	2.97	5.39	1.78	9	11	11	9
1892	60.1	90	30	5.04	6.52	3.26	8	13	10	13
1893	59.4	95	29	4.07	6.38	2.55	13	8	10	10
1894	61.4	93	30	**7.72**	**15.61**	3.57	11	9	11	13
1895	60.9	**102**	28	2.85	3.95	1.66	12	12	7	8
1896	**65.3**	98	29	3.21	4.54	1.62	10	12	9	10
1897	60.6	87	29	5.68	9.11	1.71	11	12	8	12
1898	58.5	93	29	7.00	9.26	3.92	8	8	15	18
1899	61.1	94	29	1.92	3.15	1.15	12	12	7	9
1900	60.9	98	26	4.71	7.33	2.53	13	7	11	10
1901	58.6	90	29	5.60	8.13	3.10	9	9	13	16
1902	60.3	95	29	2.04	4.63	1.11	15	11	5	7
1903	62.7	98	**21**	**0.59**	**1.32**	**0.08**	16	10	5	4
1904	62.8	97	31	2.60	6.69	1.01	17	9	5	8
1905	61.4	89	22	1.71	3.94	0.42	12	11	8	8
1906	61.0	94	24	4.21	6.28	2.37	16	8	7	10
1907	55.4	91	22	5.05	8.09	2.51	12	9	10	12
1908	61.6	95	29	7.10	9.99	**4.39**	9	10	12	13
1909	60.0	91	27	2.30	4.84	0.79	10	11	10	9
1910	60.0	94	27	2.54	4.25	1.48	10	10	11	12
1911	64.5	99	22	1.37	3.84	0.31	14	11	6	7
1912	62.0	92	31	4.09	6.47	2.79	11	11	9	11
1913	60.3	94	25	3.45	4.86	2.53	15	7	9	9
1914	63.1	98	30	2.93	5.09	0.95	14	9	7	10
1915	58.1	88	30	3.82	6.15	2.00	13	7	11	13
1916	61.1	90	33	3.48	5.27	2.14	12	11	8	12
1917	**54.0**	90	25	3.83	6.83	2.08	10	10	11	11
1918	64.6	93	31	4.94	7.59	2.74	14	10	7	12
1919	60.9	95	31	4.98	7.68	3.06	14	6	11	12
1920	57.4	89	26	3.00	5.23	1.61	15	8	8	10
1921	60.2	96	32	4.17	6.44	2.60	14	7	10	10
1922	63.0	90	23	3.84	7.55	1.16	18	6	7	8
1923	59.1	90	25	1.66	3.62	0.67	20	6	5	6
1924	56.8	87	25	5.69	7.94	3.36	12	7	12	17
1925	57.7	99	23	2.86	4.94	0.49	13	11	7	8
1926	59.1	90	26	2.58	4.52	1.08	18	9	4	9
1927	58.1	88	30	3.65	8.16	1.93	9	10	12	13
1928	58.0	93	27	2.23	3.49	1.26	12	9	10	12
1929	59.9	95	26	3.49	5.58	1.26	13	8	10	13
1930	62.7	98	31	2.75	4.50	1.54	17	7	7	9
1931	60.4	97	**21**	3.73	2.20	0.77	14	6	11	12
Normal	60.3	....	....	3.80	....	....	13	9	9	11
Extremes	....	102	21	......	15.61	0.08	......	......	......	......

UNIVERSITY OF ILLINOIS

W. B. O. Philadelphia-6-22-31-830.

Climatological Data for May, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	62.5^{e}	+1.8	95	29	28	1	45	3.27	−0.56	0.84	0	10	18	2	11	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	59.2	+1.7	90	29	29	2	47	5.82	+1.62	2.20	0	15	20	2	9	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	......	......	28	1	....	3.50	−0.13	0.78	0	13	14	7	10	s.	Brice E. Riker.
Dover	Morris	600	47	59.0	+0.4	92	29	30	1	44	6.33	+2.39	2.05	0	11	7	12	12	......	William C. Harris
Layton	Sussex	480	30	57.9	−0.1	91	29	21	1	49	4.69	+1.44	1.26	0	15	13	5	13	sw.	A. M. Depue.
Long Valley	Morris	520	1	59.4	......	92	29	30	1	45	5.85	......	1.58	0	12	17	8	6	se.	S. N .Dilts.
Newton	Sussex	769	47	60.2	+0.7	92	29	28	1	41	5.47	+1.54	1.93	0	14	13	5	13	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	61.2	−0.1	94	29	30	1	42	3.27	−0.59	0.84	0	11	15	7	9	......	Town Engineer.
Sussex	Sussex	442	36	59.8^{a}	−0.1	93	29	28	1	49	3 83	+0.11	0.82	0	13	13	5	13	n.	A. J. W. Mowatt
Means and extremes	......	......	....	59.9	+0.6	95	29	21	1	49	4.67	+0.73	2.20	0	13	14	6	11	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	61.0	+0.7	89	29	41	24	32	4.26	+0.30	1.02	0	9	17	4	10	e.	William Mann.
Boonton	Morris	400	§41	59.2	......	92	30	28	1	42	4.81	+0.75	0.95	0	12	13	2	16	ne.	John Kline.
Canoe Brook	Essex	173	1	58.2	......	91	30	26	1	44	3.83	......	0.97	......	11	15	7	9	sw.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	......	......	......	......	....	5.02	+1.52	1.27	0	13	15	8	8	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	62.7	+0.7	97	29†	32	1	44	3.46	−0.36	1.06	0	14	21	1	9	se.	Union County Park Com.
Flemington	Hunterdon	140	§45	62.0	+0.7	95	29	29	1	45	4.48	+0.46	1.31	0	13	21	3	7	sw.	Hiram E. Deats.
Jersey City	Hudson	10	33	61.6	0.0	92	30	40	1	28	3.79	+0.21	0.81	0	12	10	10	11	se.	S. K. Pearson.
Lambertville	Hunterdon	430	44	61.1	......	92	29	36	1†	38	3.72	−0.30	0.98	0	14	18	5	8	s.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	60.8	+1.1	95	30	31	1	44	4.87	+1.08	0.97	0	13	16	2	13	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	78	61.4	+1.0	94	30	32	4	39	3.24	−0.65	1.07	0	14	16	7	8	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	4.32	......	0.97	......	11	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	61.2	−0.3	94	29†	37	1	37	5.71	+1.27	1.25	0	12	9	11	11	s.	Vincent A. Messineo.
Plainfield	Union	120	43	60.4	+0.2	92	30	29	1	39	5.21	+1.29	1.27	0	13	7	13	11	sw.	S. K. Pearson.
Ridgefield	Bergen	80	14	60.0	......	93	29	35	1	37	3.88	......	1.05	0	12	14	7	10	se.	George P. Kirsten.
Somerville, near	Somerset	70	48	60.8	0.0	94	30	26	1	44	3.79	−0.06	1.13	0	14	15	4	12	w.	Julius Gerlich.
South Orange	Essex	200	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Everett W. Bird.
Verona ††	Essex	490	5	59.0	......	89	29†	34	1	30	5.48	......	1.50	0	13	6	15	10	se.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	4.12	......	0.83	......	11	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	61	60.4	−0.2	89	30	40	1	24	3.93	+0.69	0.93	0	13	8	12	11	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	60.8	+0.5	97	29†	26	1	45	4.28	+0.46	1.31	0	12	14	6	10	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	59.2	−1.9	90	30	26	5	45	1.87	−1.95	0.46	0	10	9	5	17	se.	A. F. Waldron.
Bridgeton	Cumberland	30	48	62.0	−2.0	91	30	35	1†	41	2.83	−1.01	0.93	0	8	18	6	7	se.	Bennett K. Matlack
Burlington	Burlington	12	§45	63.2	+1.3	95	30	33	4	48	4.01	−0.20	1.00	0	13	16	5	10	w.	Public Service Power Co.
Clayton	Gloucester	134	31	61.5	−0.2	90	30	30	4	42	3.34	+0.01	1.26	0	11	18	5	8	sw.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§25	61.6	......	94	30	30	5	44	1.62	−2.66	0.41	0	8	18	6	7	s.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Charles Welsh.
Imlaystown	Monmouth	115	38	1	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Carlton Lawrence.
Indian Mills‡‡	Burlington	76	42	62.0	−0.1	96	30	28	5	47	3.48	+0.24	0.92	0	11	13	9	9	s.	James M. Armstrong.
Lakewood	Ocean	54	27	60.7	+0.5	94	29	31	4†	44	2.91	−0.49	0.65	0	11	17	2	12	sw.	R. W. Holman.
Moorestown	Burlington	......	68	61.0	−0.3	92	30	34	5	41	4.11	+0.09	1.32	0	10	12	5	14	ne.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	1.83	−1.64	0.43	0	10	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	62.5	......	93	30	33	4	41	3.65	......	0.90	0	12	17	3	11	se.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	58.8	......	87	29	30	1	37	1.92	−1.34	0.65	0	11	20	3	8	s.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	61.4	......	94	29†	23	1	49	3.45	......	0.88	0	12	15	11	5	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	61.8	+0.7	92	30	38	1	34	4.00	+0.92	1.09	0	13	8	13	10	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	....	......	......	......	....	4.32	......	1.15	0	12	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	58.8	−1.1	90	28†	32	5†	45	0.77	−2.97	0.21	0	8	15	0	16	nw.	John H. Brown.
Philadelphia, Pa	......	117	60	64.2	+1.3	91	30	43	1	30	4.44	+1.18	1.17	0	12	7	12	12	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	61.1	−0.3	96	30	23	1	49	2.94	−0.92	1.32	0	11	15	6	10	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	58.2	−0.6	90	29	37	4	28	2.51	−1.07	0.75	0	8	21	5	5	sw.	Information Bureau.
Atlantic City	Atlantic	16	58	58.0	−0.1	83	16	41	5	26	1.43	−1.62	0.48	0	13	10	11	10	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	47	59.2	+0.6	82	16	36	5	27	2.76	−0.23	0.71	0	14	6	13	12	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	57.2	−1.0	88	28	33	4	32	3.55	−0.21	0.87	0	15	10	7	14	s.	William D. Martin.
Sandy Hook	Monmouth	22	33	58.5	0.0	89	29	43	1	30	4.03	+0.31	1.20	0	13	8	12	11	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	58.2	−0.2	90	29	33	4	32	2.86	−0.56	1.20	0	13	11	10	10	s.	
For the State	......	......	....	60.4	+0.1	97	29†	21	1	49	3.73	−0.07	2.20	0	12	14	6	11	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for May, 1931

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
elvidere	Delaware			.05				.22			.74	.33	.21	.15	.05							.84		.53		T.						.15	3.27
harlotteburg	Passaic		.02	.09				.12	2.08	.07	.19	.20	.25	.15	.18	.01						1.04		.81			.07					.54	5.82
ulvers Lake	Delaware		.01					.05	.55	.30	.05	.13	.15	.10	.50							.78		.67		T.	.16					.05	3.50
over	Passaic		.06					.10	1.03		*	.33	.19	.04	.20							1.29		1.04								2.05	6.33
ayton	Delaware			.03				.14	1.26	.06	.23	.16	.12	.06	.24	.07		T.				1.05		.50		.08	.04					.65	4.69
ong Valley	Morris		.01					.28	1.30	.05	.04	.42	.10	.15	.17							1.19		.84	T.							1.30	5.85
ewton	Delaware		.01					.13	.34	.17	.13	.22	.13	.21	.42							.85		.83		.02	.08					1.93	5.47
hillipsburg	...do		.02	T.				.22	.36		.09	.14	.20	.20	.04			T.				.84		.58		T.						.58	3.27
ussex	Hudson		.04					.31	.65	.17	.44	.04	.03	.19	.36			.08				.66		.60								.26	3.83
The Red Sandstone Plain.																																	
ayonne	Coast		.10					.20	1 02		.35			.65	.29							.60		.75		T.						.30	4.26
oonton ‖‖	Passaic			.09				.07	.74	.95	.35	.28		.27	.18	.10						.23	.62	.93									4.81
anoe Brook ‖‖	Essex			.10				.03	.63	.28		.45		.34	.12	.08						.36	.47	.97			T.						3.83
hatham ‖	...do			.14				.09	.21	1.08	.12	.38		.36	.22	.09						.17	.65	1.27			.24						5.02
lizabeth	Coast		.03	.01				.21	1.06	.08	.01	.37	.14	.30	.11			T.				.33	T.	.36		.03						.42	3.46
lemington	Raritan		.03					.53	.78	.05	.06	.44	.07	.22	.04			T.				1.12		.65		.07						.42	4.48
ersey City	Coast		.06					.30	.81		.20	.31	.08	.38	.20			T.				.23		.76		.02						.44	3.79
ambertville	Delaware		.13	.05				.55	.34	.10	T.	.46	.09	.16	.15			.03				.98		.55		.09						.04	3.72
ittle Falls ‖‖	Passaic			.12				.09	.88	.75	.17	.39		.33	.16	.14						.49	.45	.82							.08		4.87
ew Bruuswick	Raritan		.03	.02				.02	1.07	.14	.16	.30	.03	.28	.06			T.				.34		.68		.05	T.					.06	3.24
ew Milford ‖‖	Hackensack							.28	.07	.93	.06	.40		.38	.21	.16						.08	.97	.78									4.32
aterson	Passaic		.16					.11	1.25	.30	.60		.02	.47	.24							.85	1.25		T.	.01						.45	5.71
lalnfield	Raritan		.06	.04				.03	1.27		.39	.22	.10	.42	.11			T.				.81		.88		.04						.84	5.21
idgefield**	Hackensack		.09					.22	1.05		.09	.27	.20	.19	.15		T.					.27		.85		.02						.48	3.88
omerville	Raritan		.04	.01				.13	.49	.03	T.	.29	.18	.24	.11			.01				.99		1.13		.05						.09	3.79
outh Orange	Rahway																																
erona**	Passaic																																
oodcliff Lake ‖‖	Hackensack							.14	.10	.83	.09	.57		.45	.12	.14						.14	.76	.78									4.12
ew York, N. Y***	Coast		.06				.08	.22	.75		.45	.04	.10	.27	.22			T.				.21	T.	.75		.02						.76	3.93
The Southern Interior.																																	
elleplain	Tuckahoe			.46				.11	.12		.02	.46	.15	.01	.05			T.						.42			.07						1.87
ridgeton	Coast		.25					.68	.25		.20		.13		.04							.58		.70									2.83
urlington	Delaware		.12	.02				.26	.54		.04	1.00	.07	.02	.42			.03				.93		.55		T.	.01						4.01
layton	Delaware		.18	.04				.95	.01		.10	.10	.10	.02	.01							1.26		.57									3.34
ammonton	Mullica		.13					.19	.25				.18	T.	.07			T.				.41	.09	.30		T.		T.					1.62
ightstown	Raritan																																
nlaystown	Monmouth																																
ndian Mills	Mullica		.16					.52	.40			.47	.25	T.	.20							.50		.47		.06	.15					.30	3.48
akewood	Metedeconk		.10					.10	.40			.65	.20	.46	.36			T.				.22	.04	.33		.05							2.91
oorestown ‖‖	Delaware		.11	.04					.63	T.		1.32		.24	.25	.27							.80	.40			.05						4.11
orthfield	Coast		.28					.15	.29				.05	T.	.08							.41	.04	.43			.09					.01	1.83
emberton			.07					.46	.90		.16	.73	.08	.04	.13							.45	.08	.49		.06							3.65
leasantville ‖‖	Coast		.12	.27				.05	.01	.06		.03		.05	.06								.65	.55				.07					1.92
unyon	Coast		.09						.88	.35	.07	.32	.09	.33	.20							22	.04	.63		.23							3.45
renton***	Delaware		.08	.02				.78	.31		.51	T.	.26	.04	.30			T.				.82	.02	.66		.11						.09	4.00
renton No. 2 ‖‖	Delaware		.01	.11				T.	1.15		.12	.42	T.	.35	.36	.02			T.			.52	.53	.61			.12						4.32
uckerton	Coast		.20					.12	.05				.06	.05								.06		.21								.02	0.77
hila., Pa***	Delaware		.11	T.				.69	.23		.30	T.	.10	.02	.37			T.		T.		.96	.21	.29		.04						1.12	4.44
The Sea Coast.																																	
sbury Park	Coast		.09						.68		.16		.02		70						T.	.05		.75		.05					T.	T.	2.51
tlantic City***	...do		.24	.01			.04	.07	.03		T	.01	.07	.02	.02			T.				.48	T.	.31			.09					.04	1.43
ape May City	...do		.41	.07				.23	.10		.02	10	.21	.01	.01			T.		T.		.69	.02	.54			.29					.06	2.76
ong Branch**	...do		.10				.16	.01	.50	.01	.49	.03	.15	.41	.19			.01				.16		.87		.10						.36	3.55
andy Hook***	...do		.02				.24	.12	.68		.21	.12	.10	.11	.24			T.				.05		.92			T.					1.16	4.03

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 iuch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	29.95	30.29	1	29.65	13	14.8	40	ne.	13	80	82	82	55
ong Branch	29.94	30.29	1	29.55	16					80	60	78	
oorestown										76	57	69	
ew York, N. Y	29.93	30.28	1	29.62	16	12.3	42	w.	16	71	58	70	55
hiladelphia, Pa	29.95	30.31	1	29.64	10	11.3	35	sw.	16	70	52	62	56
idgefield	29.93	30.29	1	29.62	16								
andy Hook	29.92	30.27	1	29.60	16	11.2	34	sw.	20	80	66	81	53
renton	29.94	30.31	1	29.63	16	8.2	30	w.	16	78	66	72	61
erona													

Daily Temperatures for May, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	64	57	59	....	80	79	75	76	83	83	73	61	52	57	76	85	32	77	86	86	82	77	64	58	72	00	85	93	85	94	86	76.0^{a}
	Minimum	28	38	46	....	37	38	57	59	49	60	51	49	48	45	44	48	58	40	57	54	59	50	51	43	44	50	43	48	57	62	56	49.0^{a}
Charlotteburg	Maximum	60	60	54	70	75	76	74	68	87	77	77	60	50	51	71	83	82	71	80	81	80	74	74	62	74	74	80	89	90	89	87	73.5
	Minimum	30	25	45	32	34	31	52	55	43	58	44	45	43	45	42	41	55	35	48	56	58	48	53	43	35	43	39	42	53	61	56	45.0
Dover	Maximum	63	50	57	73	77	76	60	69	78	80	67	55	49	52	73	88	76	71	81	82	70	77	64	54	70	77	85	90	92	89	83	71.9
	Minimum	30	35	40	35	36	37	52	57	47	55	46	46	45	44	43	49	52	38	46	57	47	50	44	42	41	45	44	46	56	64	61	46.1
Layton	Maximum	63	51	51	74	76	78	63	73	78	79	68	68	57	55	72	85	71	74	81	82	73	75	58	55	68	76	83	89	91	89	81	72.2
	Minimum	21	30	40	25	32	30	55	59	46	54	47	48	46	44	36	44	54	30	54	54	55	43	45	40	37	47	34	40	50	55	58	43.6
Long Valley	Maximum	61	62	57	70	76	75	55	71	80	79	73	61	49	55	74	83	73	76	80	81	79	75	67	58	71	76	82	89	92	90	85	72.7
	Minimum	30	34	46	33	32	33	52	55	45	55	47	46	46	48	44	45	37	46	51	54	58	50	50	40	41	52	47	44	54	61	58	46.1
Newton	Maximum	61	58	56	71	78	81	68	72	79	79	66	59	50	57	76	86	81	79	83	83	79	75	67	54	68	82	84	86	92	90	83	73.6
	Minimum	28	34	36	35	39	40	52	56	46	56	44	45	43	41	42	52	52	50	51	56	54	47	46	44	40	48	50	50	56	61	60	46.9
Phillipsburg	Maximum	64	53	60	72	77	78	62	76	83	82	64	58	50	59	77	85	76	77	86	84	73	76	62	67	71	78	82	90	94	92	84	73.9
	Minimum	30	41	42	34	37	39	57	58	51	60	52	49	49	46	41	47	53	40	57	59	60	50	44	45	46	50	44	48	55	60	64	48.6
Sussex	Maximum	64	59	52	....	80	82	70	72	81	82	77	63	52	52	72	85	72	77	84	85	77	75	70	52	70	75	83	91	93	91	84	74.1^{a}
	Minimum	28	34	45	....	32	33	52	58	45	53	46	48	46	43	42	44	53	36	51	52	58	47	50	40	35	45	37	45	53	58	60	45.6^{a}
The Red Sandstone Plain.																																	
Bayonne	Maximum	58	56	63	69	67	65	64	65	72	71	66	61	51	52	74	82	70	67	66	77	66	75	73	61	65	75	78	86	59	88	80	69.4
	Minimum	42	46	45	50	46	53	50	58	54	54	50	46	46	43	49	50	55	54	54	61	57	55	50	41	50	58	56	62	67	61	65	52.5
Boonton§§	Maximum	61	51	67	69	75	76	60	76	78	79	63	54	52	55	81	84	74	70	79	87	70	75	69	59	69	79	83	88	91	92	84	72.5
	Minimum	28	33	42	32	34	35	46	55	46	50	46	47	46	43	44	45	58	38	47	54	57	49	54	44	41	47	42	46	55	59	58	45.8
Canoe Brook§§	Maximum	61	53	59	69	74	74	61	70	76	79	61	50	50	56	75	82	72	67	74	83	68	76	67	59	70	76	81	88	90	91	82	70.8
	Minimum	26	33	43	29	32	33	48	56	50	51	47	47	47	44	39	43	56	36	49	53	57	49	56	42	41	48	38	44	53	58	62	45.5
Elizabeth	Maximum	65	58	61	71	74	77	62	73	79	82	78	64	53	54	79	86	82	72	75	87	78	78	72	59	72	78	86	94	97	97	89	75.2
	Minimum	32	40	49	33	36	39	55	55	53	54	60	48	46	45	48	49	55	48	53	57	63	54	56	43	48	53	51	50	59	63	62	50.2
Flemington	Maximum	65	64	59	75	76	79	71	76	83	83	75	63	52	58	80	84	80	77	88	83	78	78	73	67	72	79	85	82	95	93	86	76.1
	Minimum	29	37	46	30	33	35	54	56	49	58	49	47	47	46	48	46	56	41	52	55	60	50	49	43	45	53	46	48	56	60	61	47.9
Jersey City	Maximum	58	54	58	63	71	71	65	66	75	76	63	58	54	55	75	82	72	70	72	83	70	78	68	59	68	76	82	88	90	92	83	70.8
	Minimum	40	43	44	42	48	46	54	56	53	50	47	47	47	44	49	58	57	54	55	60	62	56	50	43	50	57	55	60	66	67	62	52.3
Lambertville	Maximum	62	65	61	69	74	78	64	73	81	80	62	52	49	56	75	81	68	72	84	83	73	75	60	63	67	77	81	89	92	91	84	72.3
	Minimum	36	39	46	36	41	40	55	57	50	58	48	47	45	44	47	54	51	46	53	58	56	54	42	42	50	56	53	54	60	65	62	49.9
Little Falls§§	Maximum	63	55	60	73	77	77	68	69	77	78	62	53	52	58	77	85	78	71	78	86	70	86	69	59	72	81	86	93	94	95	85	73.7
	Minimum	31	35	46	33	37	37	52	57	49	52	47	46	47	44	44	46	56	41	50	55	64	52	55	43	42	51	43	49	57	61	61	47.8
New Brunswick	Maximum	61	54	61	69	75	73	67	73	75	78	71	57	50	55	76	83	81	71	83	84	79	76	70	65	67	77	81	88	92	94	89	73.4
	Minimum	33	40	49	32	36	38	52	53	51	57	47	47	47	45	45	52	59	46	53	55	63	52	51	42	47	54	53	49	59	64	62	49.5
Paterson	Maximum	59	51	56	72	71	78	70	74	76	76	60	56	50	50	75	81	76	72	77	81	68	85	70	57	67	78	82	91	94	94	85	72.0
	Minimum	37	40	48	38	41	42	55	57	51	55	47	47	47	45	45	52	58	47	52	54	64	48	50	44	46	54	50	55	62	62	65	50.3
Plainfield	Maximum	61	55	58	64	74	72	66	67	78	80	64	60	54	55	75	84	72	74	79	85	70	79	69	62	69	76	83	89	91	92	83	72.3
	Minimum	29	40	41	33	35	37	53	53	52	50	47	47	47	44	46	53	58	43	50	53	59	55	55	42	44	53	45	58	56	62	61	48.4
Ridgefield	Maximum	60	53	60	68	74	72	66	64	76	76	60	51	51	52	75	84	72	69	72	81	69	77	68	56	69	75	82	90	93	90	83	70.6
	Minimum	35	39	40	36	41	43	54	57	53	49	46	46	45	44	45	55	57	45	54	57	61	55	46	43	45	53	46	53	62	65	63	49.5
Somerville	Maximum	63	52	63	71	76	78	63	74	82	81	64	55	50	58	76	83	74	75	84	87	75	78	66	65	70	79	82	89	92	94	95	74.0
	Minimum	26	36	47	29	32	34	55	55	53	55	49	48	47	45	44	45	57	39	53	51	64	50	49	43	46	53	45	48	57	60	62	47.6
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Verona	Maximum	58	52	56	66	72	72	62	66	74	75	58	49	49	52	72	81	70	68	73	81	65	73	66	54	66	73	78	86	89	89	81	68.6
	Minimum	34	38	40	37	46	43	54	57	52	48	46	46	44	43	48	55	50	48	52	55	59	52	42	42	45	54	50	56	62	67	63	49.3
New York, N. Y	Maximum	57	53	56	62	68	68	63	64	72	73	62	54	52	53	73	79	71	66	67	78	67	76	66	54	66	76	79	85	88	89	79	68.3
	Minimum	40	44	44	43	49	47	55	56	53	50	47	46	46	44	50	58	57	54	55	61	62	56	43	43	51	59	57	61	66	68	62	52.5
The Southern Interior.																																	
Belleplain	Maximum	60	65	58	63	67	72	72	77	83	79	74	53	54	58	73	84	77	70	80	83	70	74	61	65	75	72	79	85	88	90	82	72.4
	Minimum	29	42	42	27	26	34	53	55	46	57	48	46	45	44	40	52	55	34	37	60	59	53	47	42	49	55	45	40	49	60	59	46.1
Bridgeton	Maximum	62	57	65	68	67	74	70	75	81	78	73	54	54	61	73	83	78	75	82	83	73	79	70	66	73	76	84	86	90	91	85	73.7
	Minimum	35	45	49	35	35	43	56	57	52	59	50	48	46	46	47	55	58	44	54	62	61	55	47	44	48	57	52	50	49	61	63	50.4
Burlington	Maximum	63	62	64	69	77	78	79	76	83	84	64	65	52	58	75	90	87	77	88	86	83	77	76	66	68	77	81	87	91	95	87	76.3
	Minimum	37	42	42	33	34	42	58	59	53	62	51	49	48	46	46	42	49	42	54	59	64	55	53	45	46	54	51	48	58	63	66	50.0
Clayton	Maximum	66	57	65	72	70	75	70	74	81	79	73	53	52	60	73	83	71	74	86	82	70	81	68	66	73	81	84	85	85	90	82	73.6
	Minimum	33	45	49	30	31	41	55	58	49	58	49	47	45	46	45	51	53	40	54	61	60	61	48	44	49	53	53	47	56	60	61	49.4
Hammonton	Maximum	64	57	65	69	70	78	74	75	83	81	74	53	56	58	75	84	71	75	85	84	71	79	63	66	75	75	82	87	92	94	86	74.2
	Minimum	32	44	50	32	30	38	55	58	48	60	48	48	45	45	45	52	60	39	41	61	62	55	51	41	51	54	46	49	55	51	60	49.0
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	66	57	64	71	75	76	71	76	84	84	78	59	51	56	78	85	79	75	86	86	74	78	60	68	75	75	82	88	94	96	88	75.0
	Minimum	33	45	50	30	28	40	56	59	48	50	49	48	47	46	43	50	57	39	52	60	62	55	50	45	47	53	49	44	52	60	60	48.9
Lakewood	Maximum	58	55	64	61	69	69	64	74	74	82	73	54	50	55	75	83	84	68	79	84	74	74	69	66	69	75	79	89	94	90	85	72.2
	Minimum	32	42	50	31	31	39	54	58	49	60	48	48	47	45	46	49	59	37	50	58	65	56	53	43	47	53	47	48	57	64	60	49.2
Moorestown	Maximum	63	55	63	69	75	77	70	74	80	79	63	50	50	58	75	82	67	73	86	82	69	75	62	64	68	76	80	84	89	92	84	72.1
	Minimum	35	43	41	42	34	43	57	59	52	58	49	47	45	45	46	52	49	42	54	62	60	54	45	45	51	54	50	50	58	53	62	49.9
Pemberton	Maximum	62	57	65	70	75	79	68	74	84	81	66	62	51	56	76	82	81	73	84	85	79	78	72	64	70	76	81	86	89	93	87	74.4
	Minimum	35	45	51	33	34	41	57	60	51	61	50	49	48	47	46	51	60	42	53	52	63	53	51	46	51	55	50	47	55	52	51	50.6
Pleasantville§§	Maximum	54	55	66	58	62	65	66	67	74	79	62	53	52	59	77	85	75	67	73	75	75	70	65	67	71	68	75	80	87	83	75	69.0
	Minimum	30	45	49	31	31	35	49	56	47	57	50	50	48	47	42	53	59	35	55	58	59	57	55	44	46	57	49	43	57	52	60	48.6
Runyon	Maximum	61	65	64	69	77	75	78	75	80	82	78	58	51	58	79	85	86	76	84	88	80	77	72	67	74	79	82	90	94	94	92	75.5
	Minimum	23	36	34	26	28	34	34	57	50	54	48	48	48	47	44	44	64	34	50	68	60	54	52	41	54	37	46	52	56	64	52	46.4
Trenton	Maximum	63	56	61	69	75	76	57	74	82	78	62	51	51	57	75	82	70	72	83	83	68	76	63	64	66	76	81	85	91	92	85	72.1
	Minimum	38	43	44	38	41	44	58	59	52	51	48	47	46	45	49	55	53	49	55	63	60	54	44	44	54	58	56	56	62	66	51	51.4
Tuckerton	Maximum	60	64	63	69	70	58	65	72	72	80	68	65	55	56	56	85	68	60	73	78	73	70	69	70	70	71	75	90	90	85	82	70.7
	Minimum	40	39	39	34	32	32	45	45	42	55	40	45	45	44	45	50	45	46	40	65	65	45	48	46	50	54	63	45	55	50	51	45.8
Philadelphia, Pa	Maximum	62	57	54	70	72	76	70	74	81	79	66	54	54	60	78	84	73	75	87	82	70	77	60	66	68	78	82	85	88	91	81	73.0
	Minimum	43	49	49	44	47	49	60	61	59	61	53	50	48	49	55	59	59	52	57	55	62	57	47	45	56	61	60	61	64	68	55	55.4
The Sea Coast.																																	
Asbury Park	Maximum	54	53	63	56	57	59	56	58	59	75	60	53	52	55	77	85	80	62	63	64	71	67	70	64	60	67	74	86	90	83	70	55.9
	Minimum	40	45	48	37	40	43	49	52	49	53	48	48	48	46	50	59	54	47	55	55	53	55	50	44	50	53	54	58	64	59	55	50.4
Atlantic City	Maximum	51	53	66	54	57	59	57	61	64	69	59	51	50	56	76	83	73	51	62	65	65	65	63	55	63	66	68	79	74	70	57	63.6
	Minimum	42	49	47	42	41	49	53	54	54	56	49	49	48	48	50	61	53	51	55	58	57	54	47	47	56	58	54	58	62	62	59	52.4
Cape May City	Maximum	55	56	65	58	61	65	63	67	68	77	63	56	57	60	71	82	78	66	65	59	71	62	62	66	68	70	74	81	74	73	68	67.0
	Minimum	40	48	45	38	36	46	52	54	52	56	50	49	49	48	51	58	52	48	56	58	56	51	51	46	58	56	52	54	58	50	58	51.4
Long Branch	Maximum	47	50	56	53	57	55	53	60	54	72	60	51	51	53	73	83	74	51	66	75	72	70	61	62	66	72	82	88	83	76	82	65.4
	Minimum	34	41	38	33	34	39	48	51	47	50	49	49	48	44	54	53	50	44	59	56	60	58	44	48	53	48	50	59	56	64	58	49.0
Sandy Hook	Maximum	51	51	58	59	64	59	56	62	65	71	55	50	52	54	69	78	65	60	66	75	67	71	66	62	63	69	75	86	89	86	78	65.5
	Minimum	43	45	46	45	45	44	41	51	49	50	47	47	48	45	51	58	54	51	53	56	59	57	47	46	55	57	55	56	53	54	60	51.5

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.120	*	.270	.224	.160	.178	*	.182	.224	.254	.192	*	.014	.016	.304	.320	.160	.224	.192	.272	*	.192	.288	.240	.208	.038	.288	.288	.320	.288	.150	5.606
	Wind movement	74	89	47	93	68	45	95	175	54	37	149	89	57	111	35	77	106	50	89	84	122	39	84	127	89	73	28	54	48	56	39	2383
Runyon	Evaporation	.190	.090	.210	.160	.200	.180	*	.000	.200	.200	.120	.050	.010	.000	.180	240	.200	.200	.200	.240	.040	.080	.190	.180	.150	.180	.200	.210	.210	.210	.180	4.700
	Wind movement	44	48	33	20	83	40	57	10	80	44	37	39	82	37	43	64	37	46	37	62	33	30	44	80	28	27	27	25	24	17	30	1279

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVI. JUNE, 1931. No. 6

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The June temperature averaged slightly above the normal thereby continuing the extended warm period of the present calendar year during which every month has been relatively warm. This is the eighth consecutive month with an above-normal average. About the only real cool period occurred on and near the 10th, but the lowest temperatures for the month were recorded on the 2d, 3d and 4th, and were in the forties and low fifties. Warm spells prevailed during the 4-5th, 19th-21st, and 27-30th, with the highest for the month in the upper nineties and registered on the 20th.

Rainfall was generally abundant and the average for the State was 125% of the normal. However, the more extreme southern portion is still suffering a small deficiency in precipitation, the average for that section being about 85% of the normal amount. The main rain periods were during the 1st-2d, 8-11th, 16-17th, and on the 23d, 24th and 26th. The period during the 16-17th experienced heavy rains of from one to three inches at nearly all stations.

What was apparently a very small tornado occurred near Mount Holly, Burlington County, on the evening of the 5th. The damage was limited to the uprooting of a number of trees, he destruction of several structures, and the crippling of wire ervice.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 69.3°, which was 1.0° above normal. The highest temperature was 101° at Newton on the 20th, and the lowest, 40°, at Runyon on the 3d. The greatest daily range of temperature was 47° at Runyon on the 19th. The highest monthly mean temperature was 72.5° at Burlingon, and the lowest, 66.4° at Charlotteburg.

The temperature departure from the normal for the year, 1931, o date, by sections, is: The Highlands, +1.4°; Red Sandstone Plain, +1.7°; Southern Interior, +0.8°; Sea Coast, +1.6°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from obervations of 45 stations, was 4.84 inches, which was 0.96 inch bove normal. The greatest monthly precipitation was 7.42 nches, at Boonton, and the least, 2.18 inches at Bridgeton. The greatest amount of precipitation in any 24 consecutive hours was 3.63 inches at Boonton on the 17th. The mean of the numer of days on which 0.01 inch or more of precipitation fell was 0, or normal.

The precipitation accumulated departure from the normal for he year, 1931, to date, by sections, is: The Highlands. —2.02 nches; Red Sandstone Plain, —1.05 inches; Southern Interor, —3.88 inches; Sea Coast, —4.37 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 10 miles per hour, which was 1 mile elow normal. The highest velocity, sustained for 5 consecuve minutes, was 41 miles per hour from the northwest at Trenon on the 7th.

MISCELLANEOUS.

The per cent of possible sunshine was 66, or 5 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.94 inches, or 0.04 inch below normal. The highest reading was 30.25 inches on the 25th at Trenton and Long Branch, and the lowest 29.47 inches at Sandy Hook on the 7th.

The mean stage of the Delaware River at Phillipsburg was 2.5 feet, and the highest 3.7 feet on the 1st. The mean stage at Trenton was 1.9 feet, which was normal. The highest reading was 2.6 feet on the 11th and 17th.

Thunderstorms occurred at scattered places in the State on the following dates: 1, 4, 5, 6, 7, 8, 9, 15, 16, 20, 21, 22 and 26. Dense fog was reported generally along the coast on the 7th, Atlantic City, however, reported dense fog on the 1st, 15th, 16th and 23d also. Light hail was observed at Lambertville on the 8th, at Newton on the 8th and 26th, and a heavy fall of hail was recorded at Culvers Lake on the 7th. No damage was reported.

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ERRATA.

January 1931. The mean maximum temperature at Bayonne should be 41.3° and the monthly mean temperature 34.2°. The highest temperature at Belleplain should be 62° on the 27th. The mean temperature at Cape May should be 36.5° and the greatest daily range should be 21°.

February 1931. The greatest precipitation in 24 hours at Little Falls should be 1.15 on the 18th.

COMPARATIVE DATA FOR JUNE

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	68.7	97	39	1.79	3.37	0.72				
1886	67.1	91	41	3.38	5.79	2.22	......	......	......	......
1887	68.2	97	42	6.77	10.29	4.21	......	......	......	......
1888	70.8	99	39	2.59	5.69	1.67	......	......	9	10
1889	69.9	91	40	3.73	6.75	2.39	......	......	5	6
1890	70.7	95	42	3.59	5.16	0.99	......	......	10	10
1891	69.7	102	38	2.92	6.71	1.24	11	13	6	7
1892	72.4	98	44	3.85	6.12	1.58	14	9	7	5
1893	69.7	103	40	2.95	7.02	0.46	10	12	8	11
1894	70.6	102	35	2.28	5.90	0.99	10	11	9	8
1895	71.7	103	39	3.24	5.99	0.93	14	11	5	9
1896	68.1	96	37	5.46	13.45	2.64	11	11	8	10
1897	66.1	95	35	3.38	5.50	2.12	12	10	8	10
1898	70.1	100	38	2.10	3.54	1.13	10	13	7	10
1899	72.3	103	38	2.50	4.34	1.01	14	12	4	8
1900	70.4	97	39	3.08	4.91	1.10	15	10	5	7
1901	70.0	103	35	**1.57**	4.36	0.73	12	12	6	8
1902	67.5	99	37	6.57	10.21	4.54	18	8	4	5
1903	**64.0**	92	37	**7.68**	**15.02**	2.39	14	11	5	11
1904	68.6	100	34	3.13	5.44	1.91	6	10	14	15
1905	68.3	96	35	3.43	8.71	1.67	13	10	7	12
1906	70.4	98	38	4.48	9.18	1.45	11	12	7	10
1907	64.7	96	31	4.41	6.85	3.15	11	11	8	12
1908	69.9	99	35	2.32	4.63	0.77	12	10	8	10
1909	70.0	99	36	3.26	5.70	1.71	16	12	2	4
1910	66.9	95	34	5.17	8.01	2.66	9	10	11	12
1911	68.9	97	40	5.36	10.11	2.84	9	10	11	13
1912	68.0	98	33	1.94	3.61	0.91	9	12	9	14
1913	69.1	98	31	1.80	3.76	0.68	9	12	9	8
1914	68.5	98	35	2.66	4.85	1.09	19	8	3	5
1915	67.0	95	37	3.12	6.51	1.40	16	9	6	7
1916	64.7	87	36	4.20	5.99	2.22	13	10	7	11
1917	68.9	95	40	4.27	7.14	2.80	10	9	11	13
1918	66.3	96	32	3.43	6.21	1.35	13	10	7	12
1919	69.5	99	38	3.16	3.58	**0.37**	15	9	6	8
1920	68.4	98	38	6.18	11.26	3.12	16	7	7	8
1921	70.4	100	33	3.23	5.64	1.40	13	9	8	12
1922	71 1	95	39	6.31	11.50	2.97	18	7	5	8
1923	72.5	**106**	37	2.08	5.44	0.72	12	9	9	15
1924	66.8	95	**30**	4.20	7.32	1.72	18	8	4	7
1925	**73.6**	103	36	3.10	6.16	0.72	11	11	8	13
1926	64.9	97	31	2.60	4.73	1.29	17	9	4	9
1927	65.4	97	31	3.16	5.24	1.46	12	9	9	11
1928	66.6	93	36	6.75	10.34	3.03	15	9	6	10
1929	69.5	98	33	3.11	5.41	1.41	10	9	11	15
1930	70.8	98	**30**	4.17	6.48	2.46	15	9	6	9
1931	69.3	101	40	4.84	7.42	2.18	16	8	6	8
Normal	68.3	......	......	3.88	......	......	13	10	7	10
Extremes	......	106	30	......	15.02	0.37	......	......	......	......

W. B. O. Philadelphia-7-22-31-830.

Climatological Data for June, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	71.0^{d}	+2.2	100	20	48	3	39	4.54	+0.54	2.02	0	8	19	7	4	.....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	66.4	+1.6	92	20	41	4	43	7.33	+3.21	2.20	0	13	19	3	8	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	.....	.....	.....	.....	49	2	....	5.62	+1.01	1.82	0	10	20	4	6	s.	Brice E. Riker.
Dover	Morris	600	47	67.5	+0.8	95	20	48	3†	36	5.11	+1.08	2.11	0	11	8	15	7	......	William C. Harris
Layton	Sussex	480	30	67.9	+2.4	97	30	43	25	44	4.92	+1.13	1.46	0	10	16	3	11	w.	A. M. Depue.
Long Valley	Morris	520	1	66.9^{a}	....	94	30	46	4†	45	4.72	....	1.78	0	10	18	8	4	nw.	S. N .Dilts.
Newton	Sussex	769	47	67.1	−0.9	101	20	46	2†	38	5.56	+1.58	1.26	0	9	14	3	13	sw	Irving J. Kern.
Phillipsburg	Warren	363	§48	70.2	+0.9	98	20	49	3	36	4.73	+1.10	2.10	0	8	21	2	7	......	Town Engineer.
Sussex	Sussex	442	36	68.1	+1.3	96	30	45	2†	42	5.99	+2.31	2.01	0	10	17	5	8	n.	A. J. W. Mowatt
Means and extremes	....	....	....	68.1	+1.2	101	20	41	4	45	5.39	+1.50	2.20	0	10	17	5	8	w.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	69.1	+0.7	95	20	53	11	26	4.93	+1.15	1.20	0	9	20	2	8	w.	William Mann.
Boonton	Morris	400	§41	68.0	....	95	20	47	4	38	7.42	+3.75	3.63	......	12	12	3	15	ne.	John Kline.
Canoe Brook	Essex	173	1	67.4	....	95	20	43	3	40	6.28	....	1.85	......	10	16	8	6	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	......	......	......	......	....	6.84	+2.78	1.80	0	13	18	6	6	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	71.8	+1.3	99	20	50	3	38	4.92	+1.30	2.10	0	8	21	4	5	nw.	Union County Park Com.
Flemington	Hunterdon	140	§45	73.2	+4.0	100	20	50	3	39	4.86	+1.02	1.62	0	11	18	6	6	s.	Hiram E. Deats.
Jersey City	Hudson	10	33	70.0	−0.9	95	20	54	9†	37	3.85	+0.35	1.15	0	11	14	8	8	n.	S. K. Pearson.
Lambertville	Hunterdon	430	44	69.8	....	94	20†	50	3	31	6.74	+2.83	2.19	0	14	18	7	5	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	69.6	+1.6	99	20	47	3	40	6.67	+3.15	2.18	0	13	16	6	8	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	78	70.4	+1.3	95	20	52	2†	34	4.60	+0.84	1.63	0	10	16	9	5	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	4.51	....	1.25	......	12	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Vincent A. Messineo.
Plainfield	Union	120	43	68.8	+0.2	96	20	49	3	37	4.36	+0.62	1.69	0	9	10	12	8	n.	S. K. Pearson.
Ridgefield	Bergen	80	14	69.5	....	95	20†	51	2†	33	3.79	....	1.18	0	10	14	9	7	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	69.4	+0.3	95	20†	47	3	37	5.96	+2.22	2.14	0	9	15	8	7	nw.	Julius Gerlich.
South Orange	Essex	200	59	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Everett W. Bird.
Verona	Essex	490	5	67.3	....	93	20	50	2	28	4.91	....	1.48	0	11	9	12	9	n.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	4.82	....	1.25	......	11	....	....	....	......	Hackensack Water Co.
New York, N. Y.	....	365	61	69.4	+0.6	93	20	54	9	24	4.00	+0.67	1.29	0	11	9	10	11	n.	U. S. Weather Bureau.
Means and extremes	....	......	....	69.6	+1.0	100	20	43	3	40	5.34	+1.82	3.63	0	11	16	7	7	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	67.0	−1.7	94	20	43	3†	41	2.90	−0.32	1.05	0	6	9	10	11	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	48	71.4	−0.7	97	20	52	3	33	2.18	−1.55	1.03	0	7	21	5	4	sw.	Bennett K. Matlack
Burlington	Burlington	12	§45	72.5	+2.8	97	20†	52	3	38	6.27	+2.39	2.40	0	14	17	6	7	ne.	Public Service Power Co.
Clayton	Gloucester	134	31	70.0	+0.5	97	30	50	3†	37	4.18	+0.51	1.27	0	7	24	3	3	nw.	G. E. Lamb.
Hammonton (near)	Atlantic	80	§25	70.4	....	96	20	50	3†	35	3.49	−0.03	1.43	0	10	19	4	7	sw.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Charles Welsh.
Imlaystown	Monmouth	115	38	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Carlton Lawrence.
Indian Mills‡‡	Burlington	76	42	69.9	+0.1	98	20	48	3	39	4.71	+0.58	1.72	0	7	16	7	7	sw.	James M. Armstrong.
Lakewood	Ocean	54	27	69.4	+1.9	96	20	47	3	37	4.89	+1.18	1.70	0	11	15	7	8	nw.	R. W. Holman.
Moorestown	Burlington	......	68	69.9	−0.1	96	20	51	3	31	5.94	+2.22	1.78	0	11	16	4	10	nw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	2.43	−1.24	0.80	0	6	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	71.2	....	95	20†	51	3	34	6.62	....	1.95	0	12	15	7	8	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	68.2^{a}	....	96	20†	48	3†	36	3.17	−0.76	1.14	......	9	22	2	6	s.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	69.7	....	99	21†	40	3	47	5.70	....	1.76	......	9	17	9	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	70.4	+0.9	95	20	54	3	31	4.28	+1.19	1.28	0	14	8	13	9	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	......	......	......	......	....	5.41	....	1.69	0	13	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	69.2	+0.8	98	30	45	3†	38	2.54	−1.29	1.10	0	12	17	1	12	ne.	John H. Brown.
Philadelphia, Pa	....	117	60	72.9	+1.5	98	20	57	9	28	3.75	+0.51	1.43	0	10	9	13	8	n.	U. S. Weather Bureau.
Means and extremes	....	......	....	70.0	+0.5	99	21†	40	3	47	4.31	+0.24	2.40	0	10	17	6	7	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	67.8	+0.4	92	20	55	3	24	4.41	+0.79	1.08	0	7	22	4	4	ne.	Information Bureau.
Atlantic City	Atlantic	16	58	68.4	+1.8	94	30	56	9	25	2.54	−0.50	1.29	0	8	12	11	7	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	47	68.5	+0.8	89	30	56	2	23	2.50	−0.54	0.87	0	8	4	17	9	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	69.2	+3.0	95	20	50	1	25	3.84	+0.04	0.96	0	9	16	9	5	s.	William D. Martin.
Sandy Hook	Monmouth	22	33	68.8	+1.0	90	20	54	10	24	3.66	−0.12	1.10	0	9	15	9	6	sw.	U. S. Weather Bureau.
Means and extremes	....	......	....	68.5	+1.4	95	20	50	1	25	3.39	−0.07	1.29	0	8	14	10	6	s.	
For the State	....	......	....	69.3	+1.0	101	20	40	3	47	4.84	+0.96	3.63	0	10	16	7	7	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used i determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield i Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for June, 1931

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.31						2.02			.29	.19				T.	1.40	.07						.05			.21						4.54
Charlotteburg	Passaic	.97	.05					.07	1.80	.30	.57	.15					.75	2.20				.01		.26	.05		.15						7.33
Culvers Lake	Delaware	.24			T.			1.82	.82	.05	.42	.14					1.20	.48				T.		.40			.05						5.62
Dover	Passaic	*	.21			.01		*	1.45	*	.80						2.00	.11						.33			.20						5.11
Layton	Delaware	.11	.03					1.46	.67		.68	.36					.73	.60						.22	.06								4.92
Long Valley	Morris	.44	.01						1.30	T.	.52	.03				T.	1.78							.08	.06	.25	.25						4.72
Newton	Delaware	.33						1.26	.98	.05	.47	.04					1.10	.60				T.		.45			.28						5.56
Phillipsburg	...do	.16				.14		1.80	.09	T.	.32	T.				T.	2.10				T.			.04	T.		.08						4.73
ussex	Hudson	.59	.04						2.01	.22	.65	.12					1.22	.53						.23			.38						5.99
The Red Sandstone Plain.																																	
Bayonne	Coast	.35						.40	1.20	.90	.67					.10	1.00	.07						.24									4.93
Boonton ‖‖	Passaic	.73	.01					.01	1.79	.15	.28	.40	T.				.07	3.63						.19	.04			.12					7.42
Canoe Brook ‖‖	Essex	1.53	T.				.04	.06	1.85	.08	.63	.37					.16	1.46						.10	T.		T.						6.28
hatham ‖	...do	1.25	.17				.22	.09	1.80	.13	.73	.48					.20	1.40						.12	.11			.14	T.				6.84
lizabeth	Coast	.04	.02				T.	T.	2.10	.59	1.37	T.	T.				.41		T					.25			.14						4.92
lemington	Raritan	.48	.02			T.		.02	1.62	T.	.78	.12		T.			1.60					.02		.11	.06		.03						4.86
ersey City	Coast	.21				.08		.01	1.14	.35	.80	.01				T.	.75	.16					T.	.31			.03	T.					3.85
ambertville	Delaware	.84	.04			.09		.13	1.82	.04	.84	.08		.19			2.19							.31	.08		.06	.03					6.74
ittle Falls ‖‖	Passaic	1.05	.02					.31	1.50	.23	.60	.37	.01				.11	2.18						.21	.01			.07					6.67
ew Brunswick	Raritan	.35	T.			T.		T.	1.63	.02	.97	.01	T.			T.	.90	.44						.21	.02		.05						4.60
ew Milford ‖‖	Hackensack	.83	.06					.10	1.25	.16	.34	.43					.03	1.03						.16	.09			.03					4.51
aterson	Passaic																																......
lainfield	Raritan	.34				T.		.02	1.69	.24	.64						1.28	.02						.09			.04						4.36
idgefield**	Hackensack	.09	.02			T.		.16	1.18	.20	.83	.01					.15	1.01						.14			T.						3.79
omerville	Raritan	.47						.92	1.09	.23	.85	T.	.15				2.14							.08	T.		.03						5.96
outh Orange	Rahway																																......
erona**	Passaic	.37						.89	.52	.76	.57	.03					1.48	.02			T.			.20	.01		.06						4.91
oodcliff Lake ‖‖	Hackensack	.91	.03					.36	.93	.18	.47	.32						1.25						.12	.21		.04						4.82
ew York, N. Y***	Coast	.18				.08		1.01	.28	.37	.75	.01				T.	.96	.01					T.	.31			.04	T.					4.00
The Southern Interior.																																	
elleplain	Tuckahoe	.31							.60		.77	.02					1.05								.15								2.90
ridgeton	Coast	.35							1.03		.56	.04					.11								.26			.63					2.18
urlington	Delaware	.34	.04				.06		1.34		.45	.24	.02	.03			2.40	.38				.01		.84	.05		.07						6.27
layton	Delaware	.97							1.27		.58		.02				.54							.74			.06						4.18
ammonton	Mullica	1.43	T.			T.		.02		T.	1.10	.02	.01	.07			.22	.47						T.	.11		.04	T					3.49
ightstown	Raritan																																......
nlaystown	Monmouth																																......
ndian Mills	Mullica	1.02							.86		.90			.11			1.72						T		.08		.02						4.71
akewood	Metedeconk	.46							.90	.08	.70	.05	.09				1.70	.23						.61	.03		.04						4.89
oorestown ‖‖	Delaware	.39	.08						1.78		.06	.64					1.35	.63						.55	.40		.04	.02					5.94
orthfield	Coast	.26							.80		.42			.24			.59								.12								2.43
emberton		1.29	.02			.04		T.	1.22		.70	.09		.06			1.95	.82						.34	.02		.07						6.62
leasantville ‖‖	Coast	.15	.18						.80		.11	.35		.38			.61	.53							.06		T.	T.					3.17
unyon	Coast	.72						.18	1.76	.05	1.07						1.49	.20						.11			.12						5.70
renton***	Delaware	.06	T.			.08		.97	.26	.14	.69	.01	.14			.08	1.20				T.		.01	.56	.01		.07						4.28
renton No. 2 ‖‖	Delaware	.44	.09				.21	T.	1.37		.26	.62		.06			.91	.78				.11		.02	.51			.03					5.41
uckerton	Coast	.05							.72	.02	.30	.15	.03	.04			1.10	.03							.07		.01	.02					2.54
hila., Pa***	Delaware	.16	.01					1.23	.20	.08	.61	T.				.17	.64						T.	.59	T.		.06						3.75
The Sea Coast.																																	
sbury Park	Coast	1.08				T.		T	.86	.20	.55					T	.96	T					T.	.69			.07						4.41
tlantic City***	...do	.17				T.		.35	.28	.04	.22	T	.11				1.29							.08			T.	T					2.54
ape May City	...do	.17	.02						.87		.65		T.				.70							.03	.02			.04					2.50
ong Branch**	...do	.18						.39	.50	.40	.96	T.				.36	.59						.36	T.			.10						3.84
andy Hook***	...do	.06	T.					.55	.41	.60	.65	T.				.27	.88	T.						.21			.03	T.					3.66

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	29.94	30.24	25	29.51	7	12.7	34	s.	7	76	69	82	61
ong Branch	29.94	30.25	25	29.50	7	......	......	......	......	74	68	76	......
oorestown	......	......	......	......	......	......	......	......	......	74	54	70	......
ew York, N. Y	29.94	30.22	22	29.48	7	12.2	42	nw.	7	70	56	65	67
hiladelphia, Pa	29.98	30.26	25	29.45	7	11.2	34	s.	7	67	50	57	66
idgefield	29.94	30.23	22	29.48	7	......	......	......	......	......	......	......	......
andy Hook	29.94	30.23	22	29.47	7	10.4	35	nw.	7	78	64	78	64
renton	29.96	30.25	25	29.49	7	8.0	41	nw.	7	76	56	67	72
erona	......	......	......	......	......	......	......	......	......	......	......	......	......

Daily Temperatures for June, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	71	80	78	89	89	81	89	77	....	64	80	88	....	85	77	72	82	87	93	100	92	83	76	....	....	89	94	91	92	98	....	84.5d
	Minimum	55	52	48	51	63	55	58	62	....	55	58	56	....	56	64	60	58	50	56	66	69	56	62	....	....	50	62	64	53	59	....	57.6d
Charlotteburg	Maximum	68	73	74	84	85	84	75	77	76	59	74	80	80	78	78	75	75	81	87	92	91	85	77	76	80	84	87	86	82	90	....	79.8
	Minimum	54	44	44	41	53	49	52	59	51	54	52	52	50	48	52	62	57	49	51	68	60	49	58	54	43	59	62	60	49	51	....	52.9
Dover	Maximum	66	77	75	84	86	75	77	77	62	58	75	81	77	77	72	65	80	83	89	95	85	78	66	80	83	84	90	86	86	94	....	78.8
	Minimum	55	49	48	48	57	53	55	60	53	54	55	57	53	53	57	61	57	53	57	65	68	54	59	56	49	60	63	64	56	58	....	56.2
Layton	Maximum	68	86	75	84	87	77	85	75	66	65	75	84	81	80	74	72	79	82	90	94	83	78	71	79	82	86	89	85	87	97	....	80.5
	Minimum	56	59	47	47	54	50	54	61	52	54	55	53	60	54	63	51	58	60	51	60	66	47	61	55	43	62	64	58	50	53	....	55.3
Long Valley	Maximum	68	75	75	84	85	77	82	82	71	71	72	84	78	78	76	73	78	83	84	93	79	79	73	74	70	78	79	84	....	94	....	78.7a
	Minimum	51	49	48	46	57	55	53	52	54	54	55	58	53	51	56	59	57	55	53	64	69	52	62	56	46	59	61	61	....	49	....	55.1a
Newton	Maximum	68	74	77	83	87	76	85	76	67	62	74	84	77	82	79	74	76	81	87	101	84	78	73	73	83	84	88	85	86	94	....	79.9
	Minimum	54	46	46	46	49	50	52	58	50	51	53	56	53	53	59	57	55	50	60	66	65	49	57	53	48	57	64	60	54	58	....	54.3
Phillipsburg	Maximum	64	77	78	86	85	79	87	77	69	63	79	85	78	83	77	73	81	85	92	98	90	80	70	83	84	88	91	89	90	96	....	81.9
	Minimum	58	54	49	51	64	56	58	62	57	56	58	58	60	56	65	60	58	52	56	64	66	57	62	60	51	62	65	62	55	60	....	58.4
Sussex	Maximum	78	74	74	85	88	80	82	77	71	62	77	82	82	82	82	75	77	84	90	93	87	81	70	81	83	85	89	87	87	96	....	81.4
	Minimum	56	45	45	45	54	50	53	60	52	53	55	54	53	54	60	60	58	48	56	64	68	52	61	55	45	61	61	60	51	54	....	54.8
The Red Sandstone Plain.																																	
Bayonne	Maximum	62	73	73	81	82	81	69	73	72	66	75	77	75	72	73	72	77	80	85	95	83	82	64	77	78	80	90	81	83	91	....	77.4
	Minimum	56	56	56	62	65	60	56	59	58	56	53	58	57	61	59	62	61	62	64	70	73	61	59	57	59	63	64	64	65	67	....	60.8
Boonton§§	Maximum	64	76	75	85	90	77	83	83	66	62	76	82	79	78	75	70	80	84	89	95	85	79	68	80	83	85	90	86	87	93	....	80.2
	Minimum	57	50	48	47	58	53	51	58	53	54	53	56	53	53	55	59	59	53	56	63	70	52	59	57	49	58	62	64	56	56	....	55.7
Canoe Brook§§	Maximum	66	75	75	84	86	74	82	75	72	65	77	82	80	75	75	70	80	83	89	95	85	82	69	80	83	85	89	86	87	94	....	80.0
	Minimum	58	46	43	46	61	51	51	61	54	55	53	54	54	50	55	63	58	47	54	65	69	53	59	57	50	59	60	58	49	54	....	54.9
Elizabeth	Maximum	70	79	82	90	93	84	89	81	76	62	84	86	85	78	77	76	85	89	95	99	91	84	69	85	87	89	95	89	91	96	....	84.5
	Minimum	58	51	50	52	63	57	57	62	55	54	59	56	56	55	58	67	59	54	58	69	71	62	60	59	55	62	67	64	58	61	....	59.0
Flemington	Maximum	67	76	80	86	90	82	89	82	74	63	78	88	80	85	78	79	80	80	92	100	92	82	70	85	86	86	95	89	92	99	....	86.2
	Minimum	58	54	50	52	63	57	55	62	56	55	57	57	57	54	59	61	58	54	56	67	70	58	61	59	52	62	65	65	59	60	....	60.3
Jersey City	Maximum	63	75	75	84	85	75	74	75	64	61	75	80	78	75	78	73	81	82	90	95	86	78	66	80	83	85	90	86	88	94	....	79.1
	Minimum	57	56	55	62	64	57	58	61	54	54	57	59	60	60	59	61	60	62	64	71	68	62	60	57	59	64	70	69	66	57	....	60.8
Lambertville	Maximum	67	74	77	85	85	76	86	74	69	60	75	84	78	80	79	76	79	83	89	94	89	86	70	80	83	85	89	86	88	94	....	80.7
	Minimum	57	53	50	56	63	56	55	61	56	54	56	58	56	54	56	62	56	57	60	68	75	59	60	58	56	61	65	68	61	63	....	59.0
Little Falls§§	Maximum	66	79	79	86	88	80	80	79	67	63	77	84	83	79	77	69	82	87	91	99	89	83	68	84	87	87	93	88	90	98	....	82.1
	Minimum	58	49	47	50	61	57	54	61	54	54	54	56	55	54	55	63	59	53	57	66	72	57	59	56	52	59	63	63	55	58	....	57.0
New Brunswick	Maximum	73	73	76	86	87	84	88	85	72	58	76	81	79	78	79	79	80	82	91	95	92	86	72	79	83	85	90	88	86	94	....	81.9
	Minimum	59	52	52	53	63	57	55	62	57	55	56	57	55	54	57	64	59	56	57	69	72	60	61	58	53	63	66	62	62	60	....	58.9
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	64	75	76	85	85	76	85	76	64	61	76	81	78	76	79	73	82	82	91	96	87	78	66	80	84	88	90	88	89	95	....	80.2
	Minimum	57	50	49	51	57	56	58	61	55	54	57	56	55	53	55	59	56	54	58	68	72	58	59	57	51	61	64	64	57	58	....	57.3
Ridgefield	Maximum	61	76	77	85	88	76	77	76	64	59	75	80	82	77	76	70	80	83	90	95	86	86	65	80	82	86	91	87	88	95	....	79.8
	Minimum	55	51	51	54	65	58	58	62	56	54	56	58	58	58	59	63	60	55	63	70	65	58	60	57	55	65	67	64	59	62	....	59.2
Somerville	Maximum	70	77	75	86	88	78	88	78	69	61	78	86	81	81	80	72	80	85	89	95	87	80	67	81	86	85	92	87	88	95	....	81.5
	Minimum	57	51	47	51	60	56	54	62	56	56	56	57	54	53	57	62	58	53	55	66	69	57	62	59	52	63	64	61	55	58	....	57.4
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Verona	Maximum	62	72	73	81	84	73	76	73	62	58	73	79	76	75	75	67	77	80	85	93	83	75	64	76	79	82	86	82	83	89	....	76.4
	Minimum	54	50	53	53	64	56	56	61	52	53	54	59	55	56	57	60	59	58	62	70	63	58	58	56	54	63	66	66	59	62	....	58.2
New York, N. Y	Maximum	63	74	74	82	83	73	70	74	63	60	74	78	78	73	74	72	78	81	86	93	84	75	65	78	79	81	88	82	84	92	....	77.0
	Minimum	57	56	58	63	66	57	57	61	54	54	57	60	60	62	60	61	60	63	65	71	69	63	60	58	60	64	70	70	66	68	....	61.7
The Southern Interior.																																	
Belleplain	Maximum	67	73	79	86	85	75	84	75	69	62	70	82	75	76	78	71	78	82	88	94	89	78	82	75	80	83	90	86	87	91	....	79.7
	Minimum	53	52	43	45	67	55	53	59	49	52	52	47	53	49	54	59	51	47	53	67	71	57	61	52	43	61	64	58	51	54	....	54.4
Bridgeton	Maximum	68	76	81	87	87	84	86	77	72	72	76	85	79	80	79	73	82	86	92	97	96	83	85	80	84	86	93	91	92	93	....	83.4
	Minimum	55	54	52	54	65	60	57	62	53	55	56	55	55	56	59	63	55	55	61	68	73	63	63	61	54	62	67	67	61	62	....	59.4
Burlington	Maximum	80	77	79	87	87	87	90	88	78	69	76	85	87	81	80	80	80	84	91	97	97	96	76	78	85	86	91	92	90	97	....	85.0
	Minimum	59	57	52	53	65	59	61	56	58	56	58	56	58	62	54	66	59	58	59	59	76	62	62	60	53	64	69	69	61	60	....	60.0
Clayton	Maximum	61	76	81	84	85	80	88	76	71	60	78	86	79	78	79	70	81	86	90	90	90	80	85	81	84	84	93	91	93	97	....	81.9
	Minimum	56	51	50	50	64	60	57	50	53	56	56	54	56	54	67	57	60	53	57	69	71	61	63	61	52	60	65	62	57	60	....	58.1
Hammonton	Maximum	69	76	80	86	88	78	81	79	71	74	74	86	80	80	81	80	81	84	91	96	94	79	81	78	85	86	92	88	90	95	....	82.8
	Minimum	57	55	50	53	65	57	56	62	53	57	54	53	55	52	58	63	55	52	59	69	72	59	62	59	50	59	65	62	57	60	....	58.0
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	70	74	78	88	88	79	88	78	68	63	73	84	79	80	81	76	78	86	93	98	88	79	78	79	85	88	91	87	87	96	....	82.0
	Minimum	57	52	48	49	63	60	56	62	54	55	54	51	55	58	57	64	56	51	55	69	70	62	62	60	49	60	66	63	58	58	....	57.8
Lakewood	Maximum	70	77	78	87	87	84	84	76	69	64	72	80	78	77	78	75	80	82	92	96	92	84	69	79	83	86	89	87	88	93	....	81.2
	Minimum	59	54	47	50	62	57	55	62	56	56	56	55	54	50	54	65	56	51	59	69	70	58	61	59	52	62	65	60	54	58	....	57.5
Moorestown	Maximum	62	74	78	85	86	78	89	75	68	59	76	85	79	80	82	72	79	83	89	96	87	78	73	78	83	84	90	87	87	93	....	80.5
	Minimum	57	55	51	55	64	57	58	59	55	55	54	57	58	55	59	62	58	55	60	69	68	62	62	58	55	63	67	65	62	63	....	59.3
Pemberton	Maximum	72	76	79	85	86	84	88	82	74	65	76	84	83	80	81	80	80	85	91	95	90	87	75	79	84	85	92	88	89	95	....	83.0
	Minimum	59	56	51	54	64	59	56	62	56	56	56	56	58	55	58	65	58	55	58	69	73	62	62	61	52	63	67	64	60	61	....	59.5
Pleasantville§§	Maximum	62	74	81	85	88	72	74	75	72	60	66	80	74	73	75	72	81	80	87	96	91	79	78	71	82	79	....	87	86	96	....	78.5a
	Minimum	60	54	48	49	63	60	58	58	54	55	55	52	53	54	59	64	54	50	58	68	73	61	65	61	48	60	67	....	54	63	....	57.9a
Runyon	Maximum	74	80	82	88	89	89	88	80	76	69	79	82	80	78	81	77	85	86	94	97	99	80	74	85	87	86	94	94	97	99	....	85.0
	Minimum	54	46	40	56	59	64	60	64	59	58	56	50	50	48	48	64	59	46	47	52	69	60	57	45	47	47	63	55	54	55	....	54.4
Trenton	Maximum	63	75	77	85	84	77	88	75	68	59	75	84	78	80	81	72	80	84	90	95	87	78	68	80	84	84	89	86	86	93	....	80.2
	Minimum	57	55	54	59	66	57	57	61	57	55	57	58	60	57	60	61	58	59	62	69	69	62	61	58	58	64	68	68	65	65	....	60.6
Tuckerton	Maximum	75	75	82	85	85	82	81	75	68	72	65	70	80	75	78	75	82	82	88	89	92	78	77	75	75	78	85	90	85	98	....	79.9
	Minimum	60	52	45	80	65	62	60	50	45	52	45	48	55	55	55	62	52	45	62	62	66	58	65	58	60	63	65	67	72	65	....	58.4
Philadelphia, Pa	Maximum	66	75	78	84	86	81	89	75	68	62	77	85	79	80	78	72	81	84	90	98	89	80	74	80	83	84	90	88	88	95	....	81.3
	Minimum	60	58	61	66	70	61	61	61	57	58	61	63	62	62	61	65	61	65	66	72	75	66	65	62	64	66	71	71	70	74	....	64.5
The Sea Coast.																																	
Asbury Park	Maximum	65	73	78	82	86	82	64	71	68	61	69	79	75	69	66	66	76	73	82	92	88	77	64	67	69	77	77	81	79	86	....	74.7
	Minimum	54	57	55	58	64	61	59	57	57	56	57	58	59	58	59	61	60	61	64	72	75	60	62	59	60	65	67	65	66	65	....	61.0
Atlantic City	Maximum	62	70	78	76	86	71	71	69	72	59	64	77	69	70	71	69	80	76	75	88	89	74	72	70	75	73	82	77	79	94	....	74.6
	Minimum	57	57	56	63	63	61	61	62	56	57	58	58	60	61	61	62	57	60	67	68	73	65	64	62	61	66	69	67	64	69	....	62.2
Cape May City	Maximum	62	73	78	79	84	72	71	71	69	61	68	81	71	72	71	69	77	80	76	84	85	74	81	72	76	74	87	79	81	89	....	75.6
	Minimum	56	56	56	58	62	60	60	61	57	57	58	58	60	61	61	63	60	58	64	68	70	66	66	59	57	64	70	67	63	67	....	61.4
Long Branch	Maximum	69	78	74	83	84	75	71	74	63	61	75	79	78	74	75	71	80	84	90	95	86	76	65	79	84	81	90	84	86	88	....	78.4
	Minimum	50	56	55	60	66	57	56	58	52	54	56	60	60	58	57	51	60	63	65	81	69	63	58	56	60	61	70	69	64	67	....	60.1
Sandy Hook	Maximum	62	74	75	79	83	71	69	74	65	60	70	80	75	70	70	69	75	80	87	90	83	70	65	75	74	82	85	82	84	90	....	75.6
	Minimum	59	57	58	60	66	60	59	62	57	54	58	60	60	60	60	64	62	64	65	71	68	64	61	58	60	65	68	67	68	66	....	62.0

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville••	Evaporation	.036	.176	.304	.320	.224	.320	*	*	.382	.030	.080	.060	.224	.256	.242	.050	.320	.304	.320	.320	.352	.336	.092	.160	.320	.256	....	.448	.160	.336	....	6.42
	Wind movement	98	47	40	44	54	53	91	90	45	107	63	29	51	57	46	45	49	51	43	57	67	45	80	54	29	67	59	....	85	37	....	168
Runyon	Evaporation	.120	.180	.180	.190	.200	.210	.200	.110	.110	.070	.120	.160	.160	.150	.170	.030	.000	.200	.240	.240	.240	.180	.110	.180	.190	.200	.200	.220	.220	.230	....	5.01
	Wind movement	27	21	22	20	21	23	26	40	29	29	17	17	13	13	23	14	21	14	24	22	19	19	16	22	14	30	19	12	16	15	....	62

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. ••Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVI. July, 1931. No. 7

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to
he Superintendent of Documents, Government Printing Office, Washington, D. C. It
s furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

This was the second warmest July on record. The warmest vas in 1901 with an average temperature 0.7 degree higher than his one. At Atlantic City the monthly average was the highest on record since the establishment of the station in 1874. The nighest points touched by the mercury were mostly between 95 and 102 degrees, except near the seacoast, and they occurred in nearly all cases on either the 1st or the 28th. There were but our or five days that the average was below normal, while the owest registered were in the fifties and low sixties.

The contrasts in the amounts of rain received by the southern eacoast section and that of the western border of the State was unusually great. Only 0.80 inch fell at Cape May and 1.67 at tlantic City, while along the western border the fall ranged round seven inches, with intermediate amounts over the territory between these sections. Regardless of the amounts received, the rain periods were rather well distributed throughout he month.

The wind caused some small damage on the 1st at Ocean View and Vineland, probably not aggregating more than $1000. ightning killed two farmers and three horses on the same day ear Bridgeton, Cumberland County. Three other men were njured, one seriously in the same storm, and all casualties occurred in the open fields. No damage by hail was reported.

Crops in general were in a thriving condition, except in the nore extreme southern section and near the coast, where there as been very little rain.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 36 stations, was 76.6°, which was 3.0° above ormal. The highest temperature was 102° at Runyon on the st, and the lowest, 50°, at Runyon on the 27th. The greatest aily range of temperature was 43° at Runyon on the 27th. he highest monthly mean temperature was 79.4° at Burlington, and the lowest, 73.4° at Charlotteburg.

The temperature departure from the normal for the year, 1931, o date, by sections, is: The Highlands, +1.6°; Red Sandstone lain, +1.8°; Southern Interior, +1.1°; Sea Coast, +1.9°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 4.24 inches, which was 0.29 inch elow normal. The greatest monthly precipitation was 7.55 ches, at Lambertville, and the least, 0.80 inch at Cape May ity. The greatest amount of precipitation in any 24 consecuve hours was 4.35 inches at Dover on the 10th. The mean of ne number of days on which 0.01 inch or more of precipitaon fell was 11, or 1 more than normal.

The precipitation accumulated departure from the normal for ne year, 1931, to date, by sections, is: The Highlands, +0.73 nch; Red Sandstone Plain, —1.07 inches; Southern Interior, -4.99 inches; Sea Coast, —7.08 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 9 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 37 miles per hour from the southeast at Atlantic City on the 6th.

MISCELLANEOUS.

The per cent of possible sunshine was 65, or 2 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.91 inches, or 0.07 inch below normal. The highest reading was 30.16 inches at Long Branch on the 13th, and the lowest 29.51 inches on the 22d at Ridgefield and Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 3.2 feet, and the highest 9.6 feet on the 12th. The mean stage at Trenton was 2.0 feet, which was 0.7 foot above normal The highest reading was 5.1 feet on the 12th.

Thunderstorms occurred in the State on the following dates: 1, 4, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 28, 29, 30 and 31. Dense fog was reported generally along the coast on the 6th, 7th and 8th, and also on the 9th and 25th at Atlantic City. Light hail was observed at Bridgeton on the 1st, at scattered places in the State on the 14th, at Trenton on the 21st and at Culvers Lake on the 28th. On the 10th a heavy fall of hail fell at Budd Lake, about 10 miles from Dover. Hailstones as large as hens' eggs were reported to have fallen.

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COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	75.2	100	44	3.50	7.28	1.29	......	......	......	......
1886	73.0	98	48	4.91	7.95	2.98	......	......	......	......
1887	77.1	102	54	7.67	15.29	1.95	......	......	......	11
1888	71.1	95	45	3.50	7.03	1.25	......	......	8	9
1889	73.4	95	48	10.19	18.58	4.66	......	......	13	14
1890	72.5	101	39	5.62	7.55	3.60	12	11	8	9
1891	**70.1**	95	43	5.30	9.41	3.03	10	11	10	12
1892	74.3	105	44	4.03	7.96	2.38	12	14	5	8
1893	73.9	102	40	2.72	4.63	1.26	14	13	4	8
1894	75.7	106	44	1.66	5.00	**0.15**	14	12	5	6
1895	70.9	99	41	4.26	7.73	1.53	12	12	7	10
1896	75.0	98	47	5.50	13.29	2.45	13	10	8	13
1897	74.1	102	50	**11.42**	**20.80**	6.11	10	11	10	15
1898	75.3	**107**	38	4.96	11.72	2.23	11	13	7	10
1899	74.7	98	38	5.75	9.02	3.34	13	11	7	11
1900	75.9	104	42	4.74	7.21	1.11	15	12	4	11
1901	**77.3**	**107**	45	5.87	10.92	1.89	9	13	9	14
1902	73.0	100	43	4.78	9.92	1.83	10	12	9	13
1903	73.3	100	38	5.51	10.14	3.08	16	10	5	12
1904	72.3	98	42	4.87	8.06	2.41	13	10	8	13
1905	74.4	102	42	4.06	8.19	1.67	12	13	6	12
1906	72.8	94	46	5.58	13.25	3.44	11	14	6	12
1907	73.6	96	40	2.62	6.42	0.95	8	12	11	8
1908	75.6	106	42	4.70	8.12	1.97	12	13	6	9
1909	71.6	99	36	2.12	4.03	1.03	14	14	3	5
1910	75.3	99	42	**1.36**	5.33	0.22	12	12	7	5
1911	76.0	104	42	3.64	6.46	2.06	12	12	7	8
1912	73.7	100	36	3.86	9.91	1.01	14	10	7	9
1913	74.4	100	41	2.52	4.72	1.50	20	9	2	8
1914	71.5	97	40	6.05	8.57	1.94	9	11	11	15
1915	72.8	98	44	5.31	11.06	2.23	10	13	8	14
1916	74.4	97	45	5.40	9.01	3.15	11	9	11	12
1917	74.2	104	46	4.83	7.93	2.38	10	11	10	12
1918	72.2	104	39	3.93	13.60	1.20	17	9	5	8
1919	73.5	103	43	8.39	14.14	4.45	14	7	10	14
1920	71.7	96	42	5.76	16.25	1.20	17	10	4	11
1921	76.5	99	43	3.62	7.36	1.66	14	9	8	10
1922	73.0	98	44	5.79	9.26	2.29	13	9	9	13
1923	71.9	102	40	3.88	6.28	0.93	15	8	8	11
1924	71.6	98	41	2.59	5.08	0.84	19	8	4	6
1925	72.0	99	39	7.37	10.09	4.03	15	9	7	13
1926	73.0	105	40	5.46	8.51	1.29	16	7	8	12
1927	72.7	99	36	6.06	9.34	2.95	13	10	8	11
1928	74.2	96	41	6.86	10.22	2.21	16	8	7	12
1929	73.0	102	**33**	1.64	**3.93**	0.51	17	9	5	6
1930	74.3	105	42	3.98	6.45	1.85	16	9	6	10
1931	76.6	102	50	4.24	7.55	0.80	13	10	8	11
Normal	73.6	......	......	4.53	......	......	13	11	7	10
Extremes	......	107	33	......	20.80	0.15	......	......	......	......

W. B. O. Philadelphia-8-20-31-830.

Climatological Data for July, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	77.2	+4.0	99	1†	55	27	39	5.48	+0.50	3.80	0	11	19	5	7		Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	73.4	+3.4	93	28	52	27	37	4.41	−0.42	1.52	0	13	17	3	11	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30					56	12†		5.10	+0.53	2.41	0	12	20	5	6	se.	Brice E. Riker.
Dover	Morris	600	47	74.1	+2.7	93	28	55	13	34	6.96	+1.69	4.35	0	12	5	13	13		William C. Harrls
Layton	Sussex	480	30	73.9	+3.0	95	1†	52	12†	35	7.37	+3.11	2.93	0	14	10	6	15	sw.	A. M. Depue.
Long Valley	Morris	520	1																	S. N .Dilts.
Newton	Sussex	769	47	74.2	+1.7	95	1†	54	13†	33	6.32	+1.36	3.26	0	12	8	10	13	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	77.0	+2.9	98	1	57	12	34	6.52	+1.71	4.19	0	9	20	7	4		Town Engineer.
Sussex	Sussex	442	36	74.8^{d}	+2.7	97	1	52	18	38	6.26	+1.86	1.79	0	13	13	8	10	w.	A. J. W. Mowatt
Means and extremes				74.9	+2.9	99	1†	52	12†	39	6.06	+1.29	4.35	0	12	14	7	10	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	77.0	+3.0	94	1	62	3	22	5.14	+0.53	2.15	0	11	20	2	9	w.	William Mann.
Boonton	Morris	400	§41	74.8		95	28	54	13†	35	4.43	−0.47	1.03		12	12	9	10	nw.	John Kline.
Canoe Brook	Essex	173	1	74.5		95	1	54	12†	35	4.46		0.77		13	13	13	5	sw.	N. J. Water Policy Comm.
Chatham	Morris	185	27								5.67	+1.23	0.84	0	14	17	8	6		Paul Molitor, Sr.
Elizabeth	Union	45	52	78.0^{a}	+2.7	99	28	59	13	35	3.28	−1.88	0.75	0	14	17	7	7	e.	Union County Park Com.
Flemington	Hunterdon	140	§45	77.4	+2.8	97.	1†	58	26†	37	4.81	−0.41	1.36	0	11	17	4	10	w.	Hiram E. Deats.
Jersey City	Hudson	10	33	77.7	+1.6	96	28	63	3	24	4.54	+0.10	1.50	0	13	5	16	10	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	44	76.7		95	1	59	15	27	7.55	+2.73	2.54	0	16	18	3	10	w.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	76.4	+2.6	98	28	56	26	35	2.43	−1.96	0.59	0	15	19	7	5	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	78	76.8	+2.8	96	1	60	13	30	5.65	+0.61	1.36	0	15	14	10	7	sw.	N. J. Experiment Station
New Milford‡‡	Bergen		13								3.37		0.63		14					Hackensack Water Co
Paterson	Passaic	80	60																	Vincent A. Messineo.
Plainfield	Union	120	43	76.3	+2.3	97	1	58	13	31	5.75	−0.08	1.18	0	15	7	15	9	sw.	S. K. Pearson.
Ridgefield	Bergen	80	14	76.0		96	28	59	13†	29	4.01		1.08	0	14	7	15	9	se.	George P. Kirsten.
Somerville, near	Somerset	70	48	77.1	+3.0	97	1	58	13†	34	4.70	−0.41	1.74	0	14	14	5	12	w.	Julius Gerlich.
South Orange	Essex	200	59																	Everett W. Bird.
Verona	Essex	490	5																	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13								2.18		0.47		13					Hackensack Water Co.
New York, N. Y.		365	61	76.5	+2.7	94	28	63	3	19	4.55	+0.31	1.56	0	14	4	16	11	sw.	U. S. Weather Bureau.
Means and extremes				76.6	+2.6	99	28	54	12†	37	4.53	−0.02	2.54	0	14	14	9	8	w.	
The Southern Interior.																				
Belleplain	Cape May	30	37	74.2	+0.4	97	28†	52	13	40	1.80	−2.31	0.57	0	5	18	5	8	w.	A. F. Waldron.
Bridgeton	Cumberland	30	48	78.9	+2.2	98	1†	59	26	32	2.55	−1.94	0.63	0	12	20	6	5	sw.	Bennett K. Matlack
Burlington	Burlington	12	§45	79.4	+4.4	97	1†	62	17	28	6.28	+1.54	2.10	0	11	8	18	5	se.	Public Service Power Co.
Clayton	Gloucester	134	31																	G. E. Lamb.
Hammonton (near)	Atlantic	80	§25	78.0		100	28	55	26	37	1.93	−2.78	0.88	0	7	16	10	5	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37																	Charles Welsh.
Imlaystown	Monmouth	115	38																	Carlton Lawrence.
Indian Mills‡‡	Burlington	76	42	77.2	+2.5	99	28†	54	26	39	1.85	−2.81	0.90	0	8	12	14	5	sw.	James M. Armstrong.
Lakewood	Ocean	54	27	76.2	+3.4	96	14	56	13	32	6.27	+1.42	3.03	0	9	16	7	8	sw.	R. W. Holman.
Moorestown	Burlington		68	77.2	+2.5	96	1†	60	26	32	6.51	+1.83	3.00	0	10	15	4	12	nw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	24								2.59	−1.01	1.47	0	7					William L. Flick.
Pemberton	Burlington	55		78.1		97	1	58	13†	34	2.00		0.51	0	11	11	13	7	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	77.2		98	1†	54	26	32	3.26	−0.72	2.89		9	17	9	5	s.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	75.8		102	1	50	27	43	3.80		0.98		10	13	10	8	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	77.5	+3.0	96	28	63	3	27	5.47	+1.53	2.78	0	9	10	10	11	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6								6.24		2.92	0	11					Edward H. Rlstow.
Tuckerton	Ocean	23	38	79.0	+4.9	101	28	58	4	35	2.45	−1.43	1.56	0	8	19	6	6	nw.	John H. Brown.
Philadelphia, Pa		117	60	79.8	+3.6	98	1	67	4	24	7.99	+3.84	2.99	0	11	9	13	9	sw.	U. S. Weather Bureau.
Means and extremes				77.4	+2.9	102	1	50	27	43	3.79	−0.61	3 03	0	9	15	9	7	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	76.1	+3.7	94	28	63	17	23	1.78	−2.76	0.55	0	10	16	13	2	sw.	Information Bureau.
Atlantic City	Atlantic	16	58	76.7	+4.6	93	15	65	3	20	1.67	−2.26	1.47	0	5	7	20	4	s.	U. S. Weather Bureau.
Cape May City	Cape May	17	47	76.9	+3.5	93	15	63	26	21	0.80	−2.98	0.22	0	9	5	22	4	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	77.6	+5.5	94	29	64	4	25	2.05	−2.87	0.39	0	12	13	11	7	se.	William D. Martln.
Sandy Hook	Monmouth	22	33	76.6	+2.7	94	28	64	3	22	2.44	−2.68	0.69	0	14	6	16	9	sw.	U. S. Weather Bureau.
Means and extremes				76.8	+4.0	94	28†	63	17†	25	1.75	−2.71	1.47	0	10	10	16	5	sw.	
For the State				76.6	+3.0	102	1	50	27	43	4.24	−0.29	4.35	0	11	13	10	8	sw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for July, 1931

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	....	....	.35	....	....	.45	.15	.04	.25	3.80	....	....	....	....	....	....	....	....	....	.05	.15	....	.04	....	....	....	....	....	.09	.11	....	5.48
Charlotteburg	Passaic	....	....	....	....	....	.95	.15	....	....	1.52	.80	....	....	.03	.02	....	....	.05	.50	....	.11	.02	....	.13	.07	....	....	....	....	.06	....	4.41
Culvers Lake	Delaware	....	....	.03	....	....	.59	.05	.02	T.	2.41	....	....	....	.30	....	....	....	.35	T.	....	....	.30	.65	.02	.30	....	....	T.	.08	....	....	5.10
Dover	Passaic	....	....	.02	....	....	.80	.17	.04	....	4.35	....	....	....	.74	....	....	....	.15	....	.16	....	....	.16	.25	.06	....	....	....	.06	....	....	6.96
Layton	Delaware	....	....	T.	....	....	.99	.11	.10	.25	2.93	.05	....	....	....	....	....	....	.60	T.	....	.11	1.22	.13	.35	.04	....	....	.08	.41	....	....	7.37
Long Valley	Morris	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Delaware	....	....	....	....	....	.76	.03	.02	....	3.26	.04	....	....	.81	....	....	....	....	....	....	....	.18	....	.31	.66	.04	....	....	.01	.21	....	6.32
Phillipsburg	...do	....	....	.04	....	....	.28	.97	T.	.59	4.19	....	....	....	....	....	....	....	T.	....	.07	T.	.10	.25	T	T.	....	....	....	.07	T.	....	6.56
Sussex	Hudson	....	....	.04	.02	....	.71	.80	...	.02	1.79	1.19	....	....	.09	....	....	....	.38	....	....	....	....	.40	.46	....	....	.08	....	.28	....	....	6.26
The Red Sandstone Plain.																																	
Bayonne	Coast	....	....	....	....	....	.65	.25	....	....	.30	.22	....	.45	....	....	....	....	.51	....	....	2.15	....	.27	.07	....	....	....	....	.12	.15	....	5.14
Boonton‖‖	Passaic	....	T	....	....	....	.82	.25	.17	T.	1.03	.54	....	....	....	.66	....	....	T.	.19	....	.12	.24	.15	.19	T.	....	....	....	....	.07	....	4.43
Canoe Brook‖‖	Essex	....	T.	....	....	....	.77	.37	T.	.03	.50	.67	....	....	....	.53	....	....	T	.10	....	.29	.47	.08	.15	.05	....	....	....	....	.45	....	4.46
Chatham ‖	....do	....	....	....	....	....	.58	.12	.32	.09	.84	.72	....	....	....	.74	....	T.	T.	.17	....	.40	.62	.21	.27	.06	....	....	....	....	.53	....	5.67
Elizabeth	Coast	....	.06	....	....	....	.38	.27	.22	....	.05	.64	....	....	.38	....	.01	....	.19	....	T.	.75	T.	.10	.11	T.	T.	....	....	.08	.04	....	3.28
Flemington	Raritan	....	T.	T.	T.	....	.53	.37	T.	....	1.36	.87	....	....	.54	....	....	....	.07	....	....	.34	....	.04	.40	.15	....	....	....	.14	T.	....	4.81
Jersey City	Coast	....	.09	....	....	....	.40	.27	T.	....	....	.30	....	....	.14	....	T.	T.	1.50	....	T.	1.34	....	.25	.06	.01	....	....	.03	.09	.06	....	4.54
Lambertville	Delaware	....	....	....	....	....	.61	.51	.07	....	2.30	.24	....	....	.91	.10	....	....	.23	....	.82	.95	.20	.03	.37	.04	....	....	....	.11	.06	....	7.55
Little Falls.‖‖	Passaic	....	....	....	....	.08	.59	.26	.10	....	.24	.28	....	....	....	.04	....	.14	T.	.04	....	.20	.20	.05	.12	.01	....	....	....	....	.08	....	2.43
New Brunswick	Raritan	....	T.	T	T.	....	.18	.28	.66	.01	.41	.59	....	....	.30	.42	T.	....	.04	T.	T.	1.36	1.00	.07	.06	.01	....	....	....	....	.26	....	5.65
New Milford‖‖	Hackensack	....	.06	....	....	....	....	.39	.57	.13	....	.19	.63	....	....	.24	....	....	....	.04	.03	....	.31	.43	.02	.10	....	....	....	....	.23	....	3.37
Paterson	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Raritan	....	T.	....	....	....	.47	.27	.91	.85	.91	....	....	....	.50	....	....	....	.39	....	.04	.40	.08	.13	.13	.01	....	....	....	.16	.07	....	5.75
Ridgefield**	Hackensack	....	.31	T.	....	....	.34	.19	....	.02	.08	.75	....	....	T.	....	T.	.15	.24	T.	....	1.08	.10	.10	.05	....	....	....	....	.58	.02	....	4.01
Somerville	Raritan	....	....	T.	....	....	.51	.52	.02	....	1.74	.01	....	....	.42	....	....	....	.05	....	.30	.74	.05	.03	.13	.05	....	....	....	.13	....	....	4.70
South Orange	Rahway	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Verona**	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Woodcliff Lake‖‖	Hackensack	....	.09	....	....	....	.47	.34	.12	....	.21	.29	....	....	....	.03	....	....	.05	.09	....	.05	.12	.03	....	....	....	....	....	....	.29	....	2.18
New York, N. Y***	Coast	....	.08	....	....	T.	.42	.26	T.	T.	.23	.06	....	....	.12	....	T.	T.	1.56	....	T.	1.35	....	.24	.05	.01	....	....	.02	.08	.07	....	4.55
The Southern Interior.																																	
Belleplain	Tuckahoe	.57	....	....	....	....	.20	.05	....	....	....	....	....	....	....	....	....	....	.48	....	....	....	....	....	.50	....	....	....	....	....	....	....	1.80
Bridgeton	Coast	.57	....	T.	.19	....	.31	.63	....	.03	.41	....	T.	....	....	.13	....	....	....	.17	....	.02	.03	....	.04	T.	....	....	....	....	.02	....	2.55
Burlington	Delaware	....	T.	....	....	....	.13	.34	2.10	....	.24	.93	....	....	....	2.00	....	....	.05	....	....	....	.16	....	.01	.25	....	....	....	....	.02	....	6.28
Clayton	Delaware	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hammonton	Mullica	....	T.	T.	....	....	.23	.04	.22	.02	.88	....	....	....	....	....	T.	....	.52	....	....	T.	.02	T.	T.	....	....	....	....	....	T.	....	1.93
Hightstown	Raritan	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
mlaystown	Monmouth	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
ndian Mills	Mullica	....	T.	....	....	....	.38	.11	.16	....	.90	....	....	....	....	.10	....	....	.10	....	....	....	.06	....	.04	....	....	....	....	....	....	....	1.85
Lakewood	Metedeconk	....	....	T.	....	....	.39	.10	....	T.	T.	.15	....	....	....	.12	....	....	3.03	....	....	2.25	.06	....	.04	....	....	....	....	....	.13	....	6.27
Moorestown‖‖	Delaware	....	....	....	....	....	.27	T.	3.00	....	.01	1.29	....	....	....	1.44	....	.08	.22	....	....	.06	....	.09	....	....	....	....	....	....	.05	....	6.51
Northfield	Coast	....	....	....	....	.03	.13	T.	....	.31	....	.06	....	....	....	....	....	....	1.47	....	....	....	....	....	.03	....	....	....	.56	....	....	....	2.59
Pemberton	....	....	T.	....	....	....	.22	.06	.07	....	.39	.43	....	....	....	.51	....	....	.12	....	....	.03	.01	....	....	.07	....	....	....	....	.09	....	2.00
Pleasantville‖‖	Coast	....	T.	....	....	T.	.10	.03	....	....	.05	.09	....	....	....	....	....	....	.01	2.88	....	....	.04	....	.04	....	....	....	....	.02	....	....	3.26
Runyon	Coast	....	....	....	....	....	.18	.31	....	.37	....	.32	....	....	....	.67	....	....	.08	....	....	.98	.15	....	.37	....	....	....	....	....	.37	....	3.80
Trenton***	Delaware	....	T	T.	....	T.	.20	1.58	....	T.	2.78	....	....	....	.43	T	....	....	.10	....	.01	.32	....	....	.04	....	....	....	....	.01	....	....	5.47
Trenton No. 2‖‖	Delaware	....	....	T.	T.	....	.25	1.10	.96	....	....	2.92	....	....	....	.46	....	....	.08	.07	....	.05	.27	....	.07	....	....	....	....	....	.01	....	6.24
Tuckerton	Coast	....	....	....	....	....	.09	.12	....	....	.51	....	....	....	....	....	....	....	1.56	....	....	....	.02	.01	.03	....	....	....	.11	....	....	....	2.45
Phila., Pa***	Delaware	....	....	T.	....	.04	.42	1.60	....	....	2.99	....	....	....	1.32	....	T.	....	1.20	....	.02	.19	.01	....	.17	....	....	....	....	.03	....	....	7.99
The Sea Coast.																																	
Asbury Park	Coast	....	....	T.	....	....	.55	.12	....	....	.04	T.	....	....	.25	.06	.09	....	.21	....	....	T	.07	....	.02	....	....	....	....	T.	.37	....	1.78
Atlantic City***	....do	....	....	....	....	T.	.11	T.	....	T.	T.	.05	....	....	....	....	....	....	1.47	....	....	....	T.	T.	.03	....	....	....	T.	....	.01	....	1.67
ape May City	....do	T.	T.	....	.06	....	.22	.05	....	T.	.05	.02	....	....	....	.04	....	....	....	....	....	.07	....	....	.19	....	....	....	....	....	....	.10	0.80
Long Branch**	....do	....	T.	....	....	....	.30	.26	.04	.02	.26	....	....	....	.39	T.	....	....	.27	....	T.	.37	.10	T.	.01	....	....	....	....	.02	.01	....	2.05
andy Hook***	....do	....	.01	....	....	....	.20	.69	....	.01	.25	.01	....	....	.38	....	.08	....	.20	....	T.	.25	.02	T.	.07	....	....	....	....	.19	.08	....	2.44

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time o. bservation. *** Regular Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	29.91	30.15	13	29.54	22	11.9	37	se.	6	81	72	81	61
ong Branch	29.91	30.16	13	29.55	22	......	......	......	......	80	69	73	......
Moorestown	......	......	......	......	......	......	......	......	......	79	57	72	......
ew York, N. Y	29.91	30.14	13	29.52	22	9.9	48	nw.	29	77	62	71	64
hiladelphia, Pa	29.92	30.16	13	29.52	21	9.4	53	n.	14	74	54	62	62
idgefield	29.91	30.14	13	29.51	22	......	......	......	......	......	......	......	......
andy Hook	29.90	30.15	13	29.51	22	9.3	36	w.	29	82	66	82	61
renton	29.92	30.14	13	29.54	22	6.8	31	nw.	14	77	51	68	72
erona	......	......	......	......	......	......	......	......	......	......	......	......	......

Daily Temperatures for July, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	99	89	78	85	87	85	87	88	90	77	85	85	90	95	90	86	91	81	87	85	94	94	92	89	87	90	94	99	98	92	89	89.0
	Minimum	69	58	65	68	65	67	72	75	68	65	63	56	57	67	61	68	58	69	70	65	72	66	64	66	62	57	55	70	70	71	70	65.5
Charlotteburg	Maximum	92	91	80	83	84	82	81	83	86	80	79	79	84	86	86	85	88	85	83	83	88	83	86	86	83	83	89	93	91	89	88	85.1
	Minimum	60	64	59	58	58	64	65	69	65	63	62	54	49	62	62	66	59	70	69	57	70	64	57	60	55	49	52	65	70	69	65	61.6
Dover	Maximum	91	78	75	81	81	82	82	81	83	74	83	83	86	87	87	82	87	77	77	81	86	85	88	86	83	88	91	93	92	91	85	84.1
	Minimum	62	65	62	64	64	64	69	70	69	65	63	67	55	62	64	65	60	66	67	62	62	66	63	65	61	56	57	66	70	72	65	64.1
Layton	Maximum	95	84	75	86	86	83	85	81	88	75	83	81	85	92	93	84	87	72	83	80	89	85	85	85	82	85	91	95	92	89	81	85.1
	Minimum	63	65	68	62	61	65	68	70	66	65	61	52	53	68	64	64	55	64	68	62	72	65	60	60	54	52	56	65	65	67	63	62.7
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	95	86	87	90	86	89	85	79	86	79	82	82	84	88	86	84	86	88	86	81	85	87	86	87	83	87	89	90	94	95	89	86.5
	Minimum	68	63	58	60	63	63	67	68	66	60	55	55	54	65	63	67	60	57	56	61	65	68	62	62	60	54	56	58	68	68	67	61.8
Phillipsburg	Maximum	98	84	76	86	85	83	96	86	89	76	83	84	89	95	91	87	90	78	83	82	93	87	89	89	86	89	93	97	97	91	89	87.8
	Minimum	68	69	65	69	66	67	72	72	69	66	63	57	58	67	67	68	60	69	71	65	73	67	65	67	62	58	59	71	67	72	67	66.3
Sussex	Maximum	97	92	81	84	88	82	85	81	87	79	83	79	87	88	89	....	....	90	85	84	92	88	89	83	....	87	....	95	94	92	80	86.7[d]
	Minimum	65	65	60	64	62	65	69	70	65	63	62	53	53	65	65	....	....	52	67	62	72	65	62	62	....	55	....	58	68	68	64	63.0[d]
The Red Sandstone Plain.																																	
Bayonne	Maximum	94	76	77	84	78	79	80	82	82	78	86	80	83	88	92	83	84	80	82	81	88	86	87	85	82	83	90	92	88	87	83	83.9
	Minimum	74	70	62	66	68	69	71	72	72	68	70	65	68	72	70	70	72	70	70	71	75	70	69	70	67	67	76	76	74	72	71	70.2
Boonton§§	Maximum	94	80	81	85	75	73	85	86	88	83	84	81	85	88	90	87	90	74	82	85	91	86	90	87	84	85	89	95	92	90	86	85.8
	Minimum	65	65	62	71	65	66	66	70	70	65	66	60	54	62	65	68	58	66	67	60	67	67	62	65	61	55	54	66	66	68	65	63.8
Canoe Brook§§	Maximum	95	83	79	83	84	83	82	85	85	78	83	82	86	89	89	85	86	77	82	85	92	85	86	85	82	85	91	94	93	90	83	85.4
	Minimum	63	65	61	59	63	63	69	70	70	66	65	54	54	66	63	66	56	69	68	59	72	66	61	64	61	54	56	68	70	69	63	63.6
Elizabeth	Maximum	96	89	78	88	85	82	81	86	86	84	89	87	93	94	92	91	91	79	89	90	91	90	95	91	88	88	96	99	94	....	88	89.0[a]
	Minimum	69	65	64	63	68	68	73	72	73	70	67	62	59	67	67	70	62	70	70	65	69	68	67	68	65	60	61	73	70	....	67	67.1
Flemington	Maximum	97	86	79	87	84	90	86	87	87	82	88	88	89	95	90	89	90	82	82	85	94	90	89	91	85	93	95	97	95	93	86	88.7
	Minimum	70	68	64	65	65	67	71	71	70	66	63	59	59	66	67	69	64	68	70	64	72	68	63	64	65	58	58	70	69	71	66	66.1
Jersey City	Maximum	94	79	80	83	82	83	83	85	82	78	84	84	87	90	92	87	88	76	84	84	91	87	90	86	84	86	91	96	94	91	86	86.0
	Minimum	70	66	63	67	69	65	71	71	70	69	66	65	67	70	72	74	70	68	69	70	73	68	69	69	70	67	70	77	73	73	70	69.4
Lambertville	Maximum	95	81	77	84	84	83	85	86	85	79	82	81	89	92	89	85	89	76	81	85	90	83	88	86	83	87	91	94	92	90	85	85.7
	Minimum	72	66	63	66	67	67	72	70	70	65	62	61	67	68	69	71	70	67	68	66	72	66	67	62	63	78	64	72	70	71	67	67.7
Little Falls§§	Maximum	96	84	83	86	86	83	83	87	88	82	86	85	88	89	91	86	90	81	84	87	91	89	86	86	86	88	93	98	95	94	88	87.9
	Minimum	65	65	62	60	61	66	67	70	71	67	67	57	57	67	65	67	61	67	67	62	73	62	64	65	62	56	58	70	73	69	66	64.8
New Brunswick	Maximum	96	84	80	84	84	82	84	86	82	80	84	82	90	93	94	92	90	81	83	85	90	85	89	85	83	84	89	94	93	90	88	86.6
	Minimum	70	66	63	61	66	66	72	70	71	70	66	62	60	68	67	71	63	70	69	65	73	68	66	66	66	61	62	71	69	71	67	67.0
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	97	81	80	85	84	83	83	84	83	82	84	84	88	91	90	88	89	76	84	85	92	87	89	85	85	86	91	96	95	91	85	86.5
	Minimum	68	66	65	66	64	67	71	71	70	67	66	59	58	66	67	67	66	68	68	62	72	66	65	65	64	59	60	71	69	70	67	66.1
Ridgefield	Maximum	92	79	80	83	83	79	78	82	83	81	84	83	57	89	89	85	86	76	82	84	89	86	89	84	84	86	91	96	94	90	85	85.1
	Minimum	69	63	64	63	69	67	71	70	73	72	68	61	59	67	68	67	62	68	68	65	74	68	66	67	65	59	62	72	72	70	68	67.0
Somerville	Maximum	97	83	83	85	85	86	84	89	87	83	84	83	88	93	92	88	92	76	86	86	92	85	89	88	84	89	92	96	94	94	86	87.7
	Minimum	68	69	63	64	62	68	72	72	70	67	70	68	58	66	66	69	60	69	70	64	72	68	64	65	65	58	58	71	70	70	65	66.5
South Orange	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	90	76	78	81	79	78	81	83	78	74	81	81	84	86	89	83	84	74	83	80	87	85	88	84	81	84	88	94	91	89	84	83.2
	Minimum	71	65	63	67	69	66	72	71	71	69	68	66	69	70	73	74	70	68	69	70	74	69	69	69	70	68	70	77	73	73	70	69.8
The Southern Interior.																																	
Belleplain	Maximum	94	79	82	77	83	87	87	90	82	85	85	80	88	90	87	87	92	80	83	85	92	89	92	88	88	89	92	97	97	97	92	87.6
	Minimum	64	63	57	61	60	66	71	67	67	64	62	58	52	70	67	67	55	55	55	56	56	56	65	64	62	57	58	57	58	58	57	60.8
Bridgeton	Maximum	98	85	81	80	84	90	89	91	89	83	84	86	89	95	95	92	94	89	87	85	96	89	92	85	88	91	93	97	98	95	92	89.7
	Minimum	68	68	64	63	68	68	74	70	71	70	64	65	60	72	69	71	65	71	69	66	75	68	69	67	66	59	63	70	73	72	72	68.1
Burlington	Maximum	97	96	83	84	85	89	90	88	87	83	84	86	88	94	93	90	90	88	85	87	93	91	91	86	88	87	91	95	97	95	92	89.5
	Minimum	69	69	64	67	70	65	73	72	72	70	66	69	68	69	68	70	62	68	66	65	75	70	77	69	71	70	72	70	72	72	70	69.4
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hammonton	Maximum	96	86	83	84	82	89	88	90	81	86	85	85	89	94	95	90	94	85	86	88	94	90	91	85	89	92	97	100	98	99	92	89.8
	Minimum	67	66	61	63	65	66	72	71	71	68	64	64	59	69	69	68	61	67	67	62	72	68	68	67	62	55	62	69	71	71	65	66.1
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Imlaystown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	96	84	83	85	86	86	85	88	80	82	85	84	90	96	93	88	92	83	85	88	94	88	93	87	85	90	95	99	99	96	88	88.8
	Minimum	68	67	61	64	61	67	72	70	72	70	64	61	56	68	68	68	61	66	68	63	74	68	66	68	61	54	56	69	67	72	68	65.7
Lakewood	Maximum	92	83	78	85	84	83	82	85	80	82	85	85	88	96	91	88	87	86	82	85	90	86	89	84	84	82	90	94	93	91	87	86.4
	Minimum	69	67	60	60	64	68	72	68	71	71	67	59	56	67	68	69	61	64	69	63	73	69	66	69	64	57	60	70	71	71	64	66.0
Moorestown	Maximum	96	82	81	82	85	86	87	88	83	81	84	82	87	91	90	88	89	81	85	86	91	86	90	83	84	90	93	96	96	94	86	87.2
	Minimum	69	66	63	66	66	68	73	72	71	69	65	64	61	68	69	68	64	70	65	65	75	68	66	68	62	60	61	71	69	72	69	67.2
Pemberton	Maximum	97	90	82	83	85	88	86	88	86	83	84	84	89	94	94	89	90	85	84	88	93	93	90	89	86	89	93	96	96	94	92	89.0
	Minimum	69	68	64	64	65	67	73	72	72	70	66	63	58	69	69	70	64	69	69	64	74	69	69	69	64	58	59	70	68	71	68	67.2
Pleasantville§§	Maximum	98	78	79	80	83	85	86	87	80	83	88	88	87	91	98	90	89	87	87	83	87	91	90	82	88	85	91	96	89	93	90	87.4
	Minimum	68	67	63	61	65	69	71	71	70	71	65	60	55	72	72	70	60	71	69	64	75	70	70	67	66	54	59	70	70	71	68	66.9
Runyon	Maximum	102	81	82	84	86	87	87	36	87	83	87	89	90	92	94	92	87	86	89	90	91	88	90	89	87	92	93	98	96	93	89	89.3
	Minimum	64	64	59	54	55	66	71	69	71	70	66	52	56	65	70	67	56	60	54	65	60	74	60	64	60	52	50	68	64	62	64	62.3
Trenton	Maximum	96	80	79	83	84	87	83	86	83	79	83	81	88	93	90	87	90	78	84	87	92	85	89	87	83	86	91	96	94	91	85	86.5
	Minimum	69	67	63	66	66	67	72	71	71	68	65	63	66	67	71	72	68	68	69	67	74	68	69	67	69	65	65	72	73	73	71	68.5
Tuckerton	Maximum	98	78	79	79	80	85	83	87	85	82	85	88	90	95	98	94	92	85	80	85	95	95	95	82	94	85	95	101	97	100	98	89.2
	Minimum	65	65	60	58	62	67	69	69	68	67	67	69	68	68	74	67	60	70	68	70	75	71	78	70	75	69	60	70	75	82	80	68.9
Philadelphia, Pa.	Maximum	98	86	80	81	85	89	89	90	86	79	84	84	87	92	91	88	90	84	85	86	90	87	88	84	85	88	93	96	94	93	87	87.7
	Minimum	74	71	67	67	70	70	75	74	74	71	67	69	71	68	74	75	73	71	70	70	77	70	74	70	72	72	69	77	75	76	75	71.9
The Sea Coast.																																	
Asbury Park	Maximum	91	75	75	77	79	76	79	80	80	79	86	85	85	87	85	83	82	75	79	79	80	87	84	84	85	82	90	94	90	85	86	82.7
	Minimum	75	65	65	65	69	69	70	71	72	72	69	65	64	72	69	72	63	71	70	69	74	70	72	70	69	65	67	74	72	73	70	69.5
Atlantic City	Maximum	90	74	73	74	78	78	78	83	78	80	88	89	82	81	93	87	83	82	79	81	82	89	83	78	88	82	80	91	79	88	90	82.6
	Minimum	70	66	65	67	70	70	72	72	74	73	68	69	68	74	74	74	69	72	71	73	76	71	72	70	70	68	72	72	71	70	73	70.8
Cape May City	Maximum	91	78	77	74	78	81	83	88	80	82	84	86	82	83	93	90	84	83	84	82	81	89	87	79	85	83	82	89	80	91	88	83.8
	Minimum	70	65	66	66	66	70	72	72	72	72	68	70	68	74	73	73	68	73	72	71	74	72	71	68	66	63	68	72	72	72	72	70.0
Long Branch	Maximum	90	74	80	86	76	80	83	84	80	82	89	88	84	83	93	87	84	84	80	83	87	86	86	83	86	84	93	93	94	90	88	85.2
	Minimum	68	66	65	64	70	69	73	72	74	72	67	68	67	74	73	73	70	71	70	68	77	71	71	70	66	64	68	74	73	72	68	69.9
Sandy Hook	Maximum	90	74	75	83	76	80	77	79	79	77	83	81	85	89	86	83	81	76	79	78	85	85	86	82	83	81	90	94	93	90	84	82.7
	Minimum	68	65	64	66	70	68	69	69	72	71	70	68	69	70	73	74	71	71	70	70	75	71	72	70	71	69	70	75	73	74	73	70.4

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.192	.320	.128	.224	.260	.158	.224	.272	.114	.250	.320	.352	.272	.320	.320	.288	.314	.096	.256	.176	.328	.320	.296	.256	.288	.288	.256	.212	.288	.240	.304	7.932
	Wind movement	44	49	86	22	33	100	36	48	35	43	63	46	39	62	51	44	36	51	59	49	70	80	53	58	28	46	32	50	40	73	21	1547
Runyon	Evaporation	.130	.180	.135	.170	.170	.109	.110	.160	.050	.110	.280	.250	.245	.200	.050	....	.120	.080	.200	.220	.140	.210	.220	.170	.240	.200	.190	.180	.180	.190	.210	5.090
	Wind movement	13	23	22	16	15	19	14	15	14	18	14	12	14	16	21	5	5	7	7	13	12	32	20	8	11	9	10	6	6	14	16	427

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. • Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

51.05
N NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

OL. XXXVI. AUGUST, 1931. No. 8

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to e Superintendent of Documents, Government Printing Office, Washington, D. C. It furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month witnessed somewhat of a reversal of moisture conitions so far as the northern and southern portions of the State re concerned. In the southern part, where it has been relatively drier than the north for some time, the average was nearly even inches, while in the northern half it was about half of that mount. The occurrences were well distributed throughout the month and the average for the State was a little above the noral. Cloudy weather was more than usually prevalent and e amount of sunshine was accordingly reduced. However, ken as a whole, the weather conditions were very favorable to e growth of crops.

In average temperature it ranks as a warm August but ther. ave been nine times in a record of 47 years that it was warmere here were about nine days when below-normal temperatures curred, the 1st, 2d, 11th, 12th, and from the 20th to 24th, clusive. The lowest points reached were in the fifties on the d, 24th, and 25th, while the highest were close to the 100-deree mark on the 7th in the northern half of the State and on e 3d and 7th in the southern portion.

No reports of important damage by wind, hail or lightning ere received. High tides, induced by 40-mile onshore winds, d nominal damage at Sea Bright on the 23d. An unusually gh tidal wave at Atlantic City on the 19th caused the loss of lives among the bathers.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from servations of 37 stations, was 73.5°, which was 1.5° above ormal. The highest temperature was 101° at Newton, Clayn and Hammonton on various dates, and the lowest, 45°, at harlotteburg on the 25th. The greatest daily range of temerature was 42° at Charlotteburg on the 25th. The highest onthly mean temperature was 75.7° at Burlington, and the west, 70.2° at Charlotteburg.

The temperature departure from the normal for the year, 1931, date, by sections, is: The Highlands, +1.6°; Red Sandstone ain, +1.8°; Southern Interior, +1.1°; Sea Coast, +1.9°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from obrvations of 45 stations, was 5.10 inches, which was 0.36 inch ove normal. The greatest monthly precipitation was 9.61 ches, at Bridgeton, and the least, 2.26 inches at Phillipsburg. e greatest amount of precipitation in any 24 consecutive hours as 3 56 inches at Cape May on the 22-23d. The mean of the umber of days on which 0.01 inch or more of precipitation fell as 12, or 2 more than normal.

The precipitation accumulated departure from the normal for e year, 1931, to date, by sections, is: The Highlands. —0.35 ch; Red Sandstone Plain, —1.74 inches; Southern Interior, 2.66 inches; Sea Coast, —5.98 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 2 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 56 miles per hour from the northeast at Atlantic City on the 23d.

MISCELLANEOUS.

The per cent of possible sunshine was 53, or 13 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.00 inches, or normal. The highest reading was 30.39 inches at Trenton on the 14th, and the lowest 29.57 inches at Trenton on the 10th.

The mean stage of the Delaware River at Phillipsburg was 1.2 feet, and the highest 1.9 feet on the 1st. The mean stage at Trenton was 0.7 foot, which was 0.4 foot below the normal. The highest reading was 1.4 feet on the 1st.

Thunderstorms occurred in the State on the following dates: 3, 4, 5, 7, 9, 10, 11, 14, 15, 16, 19, 20, 25, 27, 28 and 29. Dense fog was reported along the coast on the 3d and 8th, and at scattered places throughout the State on the 3d, 9th, 12th, 13th, 14th, 16th, 20th, 25th and 27th. A light fall of hail was recorded at Layton on the 3d.

COMPARATIVE DATA FOR AUGUST

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	71.7	95	40	6.11	10.09	8.47	......	......	......	......
1886	69.5	96	42	2.81	5.36	[illegible]	......	......	......	......
1887	70.4	94	42	3.76	7.34	2.09	......	......	......	8
1888	72.5	98	41	6.13	10.53	2.55	......	......	8	9
1889	69.6	91	45	5.13	9.06	1.93	......	......	8	10
1890	71.5	99	40	4.90	7.51	2.89	8	15	8	11
1891	72.8	100	46	5.32	8.89	2.58	8	11	12	13
1892	73.4	99	46	3.63	5.65	0.72	12	13	6	9
1893	72.8	98	38	6.52	11.94	3.55	14	11	6	8
1894	70.9	97	41	2.58	9.28	0.15	13	12	6	7
1895	74.2	102	**34**	2.53	5.06	**0.02**	16	12	3	7
1896	73.6	105	39	1.83	**3.27**	0.50	17	10	4	7
1897	71.0	91	41	4.39	8.69	2.07	14	12	5	9
1898	74.8	98	42	5.36	9.28	2.70	12	12	7	10
1899	72.3	99	39	4.36	9.70	2.16	10	12	9	9
1900	**76.3**	104	41	2.68	4.56	0.70	15	11	5	10
1901	73.8	98	44	**9.43**	15.80	4.88	12	10	9	11
1902	70.1	93	40	3.91	10.67	1.31	15	13	3	9
1903	68.4	98	39	6.95	14.54	4.30	10	10	11	13
1904	70.8	92	37	6.62	13.01	2.65	15	10	6	9
1905	71.1	95	38	5.72	9.88	3.51	13	10	8	12
1906	74.6	97	42	5.95	**17.91**	2.21	10	11	10	13
1907	70.5	96	39	3.45	7.61	1.79	14	12	5	10
1908	70.6	103	36	5.05	9.23	2.43	11	10	10	10
1909	70.2	100	**34**	4.59	12.94	1.41	14	9	8	6
1910	70.4	92	36	3.78	8.46	1.76	9	10	12	10
1911	72.1	101	39	8.91	14.74	**5.31**	10	11	10	11
1912	70.0	95	35	3.42	7.62	1.19	12	13	6	10
1913	71.7	100	38	4.06	10.21	1.93	18	9	4	10
1914	73.3	98	46	3.15	6.53	1.04	13	12	6	9
1915	70.9	98	41	7.73	10.92	4.02	11	11	9	13
1916	73.2	100	40	**1.34**	4.15	0.27	20	7	4	6
1917	74.0	103	42	2.21	5.68	0.86	18	9	4	8
1918	74.4	**108**	40	1.85	4.25	0.34	18	7	6	7
1919	69.9	98	38	6.89	12.88	3.09	13	10	8	13
1920	72.3	94	42	6.10	10.60	2.94	8	11	12	17
1921	69.8	97	38	4.32	8.01	2.05	18	7	6	9
1922	71 2	96	39	4.03	6.78	2.18	13	9	9	12
1923	70.8	98	35	2.44	4.81	1.23	17	8	6	8
1924	71.9	102	38	4.40	9.48	1.82	18	8	5	8
1925	71.0	93	35	2.10	4.12	0.94	20	6	5	7
1926	72.8	101	38	6.58	8.84	3.74	11	9	11	14
1927	**67.1**	89	37	8.55	12.87	2.88	11	9	11	12
1928	74.5	99	45	6.72	14.26	3.33	12	8	11	13
1929	69.8	97	39	2.58	4.86	0.88	16	8	7	9
1930	71.1	101	**34**	3.32	5.58	1.92	16	9	6	6
1931	73.5	101	45	5.10	9.61	2.26	12	8	11	12
Normal	72.0	......	......	4.74	......	......	13	11	7	10
Extremes	......	108	34	......	17.91	0.02	......	......	......	......

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Climatological Data for August, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	73.4[a]	+2.4	99	7	53	22	36	2.75	−1.86	0.62	0	11	13	9	9	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	70.2	+2.3	93	7	45	25	42	3.62	−1.00	1.37	0	13	19	1	11	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	......	......	50	1	....	2.97	−1.45	1.07	0	10	17	7	7	ne.	Brice E. Riker.
Dover	Morris	600	47	70.4	+1.3	95	7	51	25	34	4.16	−0.60	0.99	0	15	3	12	16	......	William C. Harris
Layton	Sussex	480	30	70.4	+2.0	93	6†	47	31	37	5.01	+1.11	1.73	0	11	10	3	18	sw.	A. M. Depue.
Long Valley	Morris	520	1	......	......	......	......	......	......	....	3.51	......	1.01	0	10	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	47	71.0	+0.6	101	7	51	31	38	3.76	−0.66	0.93	0	14	8	9	14	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	73.1	+1.3	99	7	53	30	38	2.26	−2.36	0.78	0	12	17	7	7	......	Town Engineer.
Sussex	Sussex	442	36	71.4[b]	+1.9	96	7	50	25†	36	2.41	−1.85	1.15	0	8	14	9	8	n.	A. J. W. Mowatt
Means and extremes	......	......	....	71.4	+1.7	101	7	45	25	42	3.38	−1.08	1.73	0	12	13	7	11	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	75.2	+3.0	94	5†	62	11†	24	2.71	−2.35	1.30	0	9	15	12	4	sw.	William Mann.
Boonton	Morris	400	§41	71.5	......	95	7	49	2†	39	3.80	−1.28	1.70	0	13	9	4	8	sw.	John Kline.
Canoe Brook	Essex	173	1	71.4	......	95	7	51	2†	36	4.50	......	1.22	0	14	10	11	10	sw.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	......	......	......	......	....	5 84	+1.43	1.18	0	15	14	11	6	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	75.0	+1.6	99	7	55	25	35	4.03	−0.26	0.90	0	15	14	9	8	w.	Union County Park Com.
Flemington	Hunterdon	140	§45	74.3	+1.8	99	6†	54	25	36	4.29	−0.42	1.32	0	15	14	8	9	s.	Hiram E. Deats.
Jersey City	Hudson	10	33	75.2	+1.1	95	7	61	24	22	3.21	−1.32	1.50	0	14	7	15	9	ne.	S. K. Pearson.
Lambertville	Hunterdon	430	44	73.5	......	95	3†	56	22†	29	4.64	−0.02	1.66	0	12	12	8	11	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	73.6	+0.4	99	7	51	25	38	3.40	−1.00	1.35	0	15	12	9	10	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	78	74.0	+1.9	96	7	55	25	30	5.24	+0.09	1.76	0	13	9	18	4	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	4.09	......	1.33	......	14	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	......	......	......	......	......	......	....	......	......	....	......	....	....	....	....	......	Vincent A. Messineo.
Plainfield	Union	120	43	73.0	+1.2	96	7	53	25	32	4.35	−0.86	1.00	0	14	6	13	12	ne.	S. K .Pearson.
Ridgefield	Bergen	80	14	73.2	......	97	7	54	25	33	4.10	......	1.65	0	17	5	15	11	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	74.1[b]	+1.7	98	7	53	25	36	3.47	−1.37	0.95	0	12	10	3	18	nw.	Julius Gerlich.
Verona	Essex	490	5	71.4	......	92	7	55	25	27	3.21	......	1.14	0	13	9	9	13	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	3.39	......	1.42	......	12	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	61	74.4	+1.3	93	7	61	24	20	3.26	−1.07	1.58	0	13	7	9	15	ne.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.3	+1.6	99	6†	49	2†	38	4.07	−0.67	1.76	0	14	11	10	10	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	72.0	−0.6	97	3	50	25	40	7.72	+3.42	2.03	0	10	11	6	14	ne.	A. F. Waldron.
Bridgeton	Cumberland	30	48	75.2	+0.2	100	3	54	24	30	9.61	+5.02	2.21	0	14	19	3	9	sw	Bennett K. Matlack
Burlington	Burlington	12	§45	75.7	+1.5	99	7	56	25	34	6.69	+1.24	2.05	0	10	10	8	13	sw.	Public Service Power Co.
Clayton	Gloucester	134	31	74.2	+1.1	101	6†	56	25†	37	7.17	+2.25	1.53	0	14	22	2	7	nw.	G. E. Lamb.
Freehold	Monmouth	......	....	......	......	......	......	......	......	....	5.54	+0.83	1.15	0	15	....	....	....	......	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§25	74.6	......	101	3†	53	25	36	7.18	+3.20	1.47	0	11	12	9	10	sw.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Charles Welsh.
Indian Mills‡‡	Burlington	76	42	73.7	+1.1	100	7	54	25	38	7.36	+1.43	1.70	0	10	9	11	11	ne.	James M. Armstrong.
Lakewood	Ocean	54	27	73.8	+2.7	95	3†	51	25	32	5.46	−0.59	2.40	0	10	13	7	11	nw.	R. W. Holman.
Moorestown	Burlington	......	68	73.4	+0.8	98	3†	56	25	32	6 13	+1.24	1.61	0	14	11	7	13	ne.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	5.65	+1.30	1.36	0	10	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	75.5	......	98	3	57	25	33	7.68	......	1.70	0	11	13	5	13	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	74.0	......	95	9	50	25	37	6.05	+1.12	1.44	......	14	17	7	7	ne.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	74.2	......	99	6†	48	24	41	4.78	......	1.37	......	9	12	16	3	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	74.0	+1.0	96	7	58	23	26	6.39	+1.64	2.72	0	14	7	9	15	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	......	......	......	......	....	6.88	......	2.23	0	15	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	74.8	+2.1	96	7†	58	23†	29	7.25	+1.71	1.62	0	11	13	6	12	sw.	John H. Brown.
Philadelphia, Pa	......	117	60	76.3	+1.5	98	7	60	23	22	6.00	+1.38	1.84	0	16	9	9	13	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.2	+1.1	101	3†	48	24	41	6.72	+1.83	2.72	0	12	13	7	11	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	71.6	+2.8	94	7	59	25	25	4.70	−0.36	1.10	0	12	23	4	4	sw.	Information Bureau.
Atlantic City	Atlantic	16	58	74.5	+2.0	91	17	61	24	22	7.21	+2.72	1.85	0	11	8	11	12	s.	U. S. Weather Bureau.
Cape May	Cape May	17	47	74.0	+0.6	88	6	60	22	19	6.97	+2.71	3.56	0	11	6	13	12	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	73.4	+2.4	95	7	55	25	31	6.27	+0.14	1.86	0	13	10	8	13	ne.	William D. Martin.
Sandy Hook	Monmouth	22	33	74.3	+1.5	96	7	61	23	22	5.26	+0.28	1.85	0	13	5	10	16	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.2	+1.9	96	7	55	25	31	6.08	+1.10	3.56	0	12	10	9	12	s.	
For the State	......	......	....	73.5	+1.5	101	3†	45	25	42	5.10	+0.36	3.56	0	12	12	8	11	sw.	

† On other dates also.   § Length of precipitation record; temperature record is much shorter.   § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.   †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc.   T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for August, 1931

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.26	.10					.39	.39	.21	.18			.06									.07		.12	.62		.35			2.75
Charlotteburg	Passaic			.02	.40			.02			.29	.45	.67	.02		.12					.09			.08				.01	1.37	.08			3.62
Culvers Lake	Delaware		T.	.33	T.			T.		.04	.15	.20	.35	.08		.05				.45								1.07	.25	T.			2.97
Dover	Passaic			.40		.22				.32	.44	*	.95	.04		.36				.19				.19		.30		.50	.18	.06	.01		4.16
Layton	Delaware		.27	1.48				.08		.06	.24	.02	.56			.28				.26								1.73		.03			5.01
Long Valley	Morris				.64						.21	.45	.46	.04	.06			.36						.14					1.01	.14			3.51
Newton	Delaware		.01	.18						.10	.40	.26	.26	.10		.36				.93				.16		.05		.85	.02	.08			3.76
Phillipsburg	...do	T.		.04					.23	.24	.78	.15	.13	.03		.03				T				.17			T.	.32	.10	.04			2.26
Sussex	Hudson		.03	.13								.36	.41	.07			.22							.04					1.15				2.41
The Red Sandstone Plain.																																	
Bayonne	Coast			.24						.10	.20	1.10	.35		.45											.10	T.	.10		T.	T.	.07	2.71
Boonton ‖‖	Passaic			.01	.49				T.		.09	.26	.87	T.		T.	.08				.05				.10		.03		1.70	.05	.04	.03	3.80
Canoe Brook ‖‖	Essex				.33		T.				.07	.52	1.22	.03		.03	.08				.63				.11		.62		.62	.09	.12	.03	4.50
Chatham ‖	...do				.35		.04			.03	.09	.54	1.18	.21		T.	.40				.55				.34		.97		.58	.23	.14	.19	5.84
Elizabeth	Coast		T.		.49					.01	.07	.90	.80	T.	.10	.10	T.				.28	.01		.03	.05	.59	T.	.40	.02	.18		T.	4.03
Flemington	Raritan	.02			.62					.24	.06	1.32	.51	.02	T.	.04					.73	.02		.15	.08		T.	.08		.41		.01	4.29
ersey City	Coast		T.	.02	.32			T.		.04	.24	1.50	.26		T	.42				.25		T.		.03	.06	T.	T.	.01	.01	.04	.01		3.21
ambertville	Delaware	T.			.47					.31	1.66	.77	.49		T.	.06					.10	.08		.48	T.		T	.04	.07	.11			4.64
ittle Falls ‖‖	Passaic			.01	.21				.11		.07	.35	1.35	.08			.05				.28	.01			.08				.61	.05	.10	.04	3.40
New Brunswick	Raritan				.08	T.	T.			T.	.16	1.76	1.18	.02	.55	.76					.28	.03	T.	.17	T.	T.	T.	.03	.03	.19			5.24
New Milford ‖‖	Hackensack			.14	.30				.02		.03	.40	2.33	.03			.08				1.23				.11				.15	.03	.18	.06	4.09
atersou	Passaic																																......
lainfield	Raritan	T.		.88						.10	.41	1.00	.24	T.		.12				.03		.19		.07	.01	.04		1.00		.25		.01	4.35
idgefield**	Hackensack		T.		.17			.15		.05		.45	1.20	.01	.02	.07				1.53		T.		.02	.01	.04		.22	.01	.14	.01		4.10
omerville	Raritan	T.		.30	.07					.13	.70	.95	.52			.06				.10				.30		.01			.04	.29		T.	3.47
erona**	Passaic		T.	.29				T.		.14	.16	1.14	.19	T.		.10				.10				.10		.01		.72	.05	.20	.01		3.21
Woodcliff Lake ‖‖	Hackensack			.02	.14							.45	1.42	.04			.12	.12			.43								.50	.04	.08	.03	3.39
New York, N. Y***	Coast		T.	.37				T		.04	.31	1.56	.06		T.	.41				.28		T		.03	.06	T.	T	.01	.08	.04	.01		3.26
The Southern Interior.																																	
elleplain	Tuckahoe					.36					.18	1.22	1.12			.51						.95	.28	2.03	1.02					.05			7.72
ridgeton	Coast				.10	.03					.39	1.49	1.36	.02	.04	2.08				T.	T.	.55	.25	2.21	.64			.39	.06				9.61
urlington	Delaware				.20					.08		2.05	1.50			1.05						.21	T.	.60	.61		T.		.17	.22			6.69
layton	...do				.24					.14	T.	1.53	.97		.43					.08	.03	.72	.22	1.10	.99			.45	.19	.08			7.17
reehold	Raritan				.05						.18	1.15	1.13	.03		.03	.70				.15	.03	.09		.44			.02	.62	.62	.30		5.54
ammonton	Mullica		T.		.01					.10		1.47	.85		T.	1.11				T.	T.	.18	.06	1.43	1.42				.47	.08			7.18
ightstown	Raritan																																......
ndian Mills	Mullica									.15	.62	1.70	.98			1.08					T.	.25		1.24	1.14			.14		.06			7.36
akewood	Metedeconk				.23						.13	.96	2.40			.40					T.	.10	T.	.17	.75			T.	.17	.15			5.46
oorestown ‖‖	Delaware				.07						.05	1.31	1.61	.12		.55	.36				T.	.04	T.	.40	1.20	.01			.16	.11	.14		6.13
orthfield	Coast					.20					.07	1.26	1.05			.93						.38	.02	1.36	.35					.03			5.65
emberton					.26						.07	1.70	1.25	T	.91	1.30						.18	T.	.53	1.09		T.		.08	.31		T.	7.68
leasantville ‖‖	Coast				.20	.27					.13	1.12	1.44	.03		.16	.57				T.	.03	.26	.71	1.11	.01				.01			6.05
unyon	Coast				.14					.17		1.37	1.18			1.02					.25	.19		.21						.25			4.78
renton***	Delaware	T.		.04	.02					.81	1.95	1.56	.28		T.	.61				T.	.01	.10	T.	.61	.01		T	.13	.20	.06	T.		6.39
reuton No. 2 ‖‖	...do				.04						.70	2.23	1.57	.20		.32	.50					.03	.10	.16	.53	.03		T.	.25	.17	.05	T.	6.88
uckerton	Coast			.92							.02	.99	1.41	.02		1.62						.22	.12	.80	1.10				.03				7.25
hila., Pa***	Delaware			.09						.10	1.14	1.22	.16	T.	.01	.65				T.	.02	.25	.03	1.60	.19			.24	.23	.06	.01		6.00
The Sea Coast.																																	
sbury Park	Coast	T.		T.	.46					.02	1.10	1.10	.54			.40				.03		.05		.10	.65			T.	.03	.22			4.70
lantic City***	...do	T.				.05				.06	.88	1.00	.79	T.		1.85					T.	.38	.03	1.65	.51					.01		T.	7.21
ape May	...do	T.		.02		.10				T.	.13	.68	.58		T.	.74				.02		.78	.21	3.56	.15					T.			6.97
ong Branch**	...do			.40						.09	.99	1.86	.76			.48				.04		.10		.43	.50	T.	T.	.16	.27	.19			6.27
ndy Hook***	...do	T.	T.	.63	T.				T.	.19	1.46	1.79	.08	T.	T.	.30				.07		.10		.11	.14	T.	T.	.09	.15	.15		T.	5.26

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ ‖ Precip-
ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	30.00	30.36	14	29.58	10	13.7	56	ne.	23	82	73	82	51
ng Branch	30.00	30.36	14	29.60	10					76	60	70	
oorestown										81	59	78	
w York, N. Y	30.00	30.36	14	29.61	10	9.2	40	nw.	3	75	60	71	58
iladelphia, Pa	30.02	30.38	15	29.56	10	10.0	36	n.	23	75	56	66	52
dgefield	30.00	30.35	14	29.60	10								
ndy Hook	30.00	30.37	15	29.58	10	10.4	38	ne.	11	82	66	81	46
enton	30.02	30.39	14	29.57	10	7.3	31	nw.	10	81	60	71	61
rona		30.39	14	29.62	10		27	nw.	3	76	55	81	

Daily Temperatures for August, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	77	76	98	90	95	98	99	75	82	86	70	69	....	86	87	91	91	89	88	82	75	76	81	83	91	85	86	82	78	84	83	84.8ᵃ
	Minimum	62	57	71	68	61	62	63	67	67	69	63	62	....	65	69	64	60	60	67	61	68	53	55	57	55	61	63	61	68	55	54	62.1ᵃ
Charlotteburg	Maximum	80	74	92	90	91	92	93	91	83	85	78	66	81	85	85	84	85	87	87	85	78	75	75	72	87	85	82	78	76	78	79	82.5
	Minimum	47	58	65	65	55	53	54	60	63	68	59	59	64	61	60	68	62	59	60	57	56	52	55	56	45	57	60	56	64	50	51	58.0
Dover	Maximum	74	73	91	86	95	94	95	81	85	85	69	67	79	82	81	86	86	87	86	76	70	75	67	75	84	79	81	77	74	79	75	80.3
	Minimum	62	53	57	61	60	61	62	66	66	63	61	60	64	65	68	63	62	61	62	62	62	55	55	58	51	62	62	60	62	53	54	60.4
Layton	Maximum	76	71	91	84	90	93	93	84	80	81	71	69	81	86	83	85	88	87	86	78	74	78	70	82	87	82	85	76	75	80	77	81.4
	Minimum	59	51	66	63	58	60	62	63	67	66	62	60	64	64	66	64	58	58	61	60	61	52	53	53	50	57	61	61	64	49	47	59.4
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	79	75	93	83	94	96	101	84	89	86	70	68	87	84	83	88	97	90	88	79	78	79	73	76	87	81	85	79	79	80	78	83.5
	Minimum	58	54	62	64	59	60	63	60	63	63	58	57	60	60	66	60	60	58	61	56	53	54	53	54	53	58	60	56	62	53	51	58.4
Phillipsburg	Maximum	76	71	96	88	93	96	99	84	85	85	70	69	84	84	86	80	91	92	89	81	74	79	71	82	89	83	85	82	78	83	81	83.7
	Minimum	62	60	71	68	60	60	61	68	67	64	64	62	66	64	70	66	63	63	67	60	64	57	60	59	55	62	63	61	63	53	54	62.5
Sussex	Maximum	78	77	94	88	84	95	96	85	83	83	75	68	83	86	....	85	86	88	85	80	75	77	71	80	77	84	....	83	78	79	76	82.0ᵇ
	Minimum	60	52	66	66	60	59	61	64	67	69	68	63	65	65	....	62	61	60	64	56	62	54	56	56	50	74	....	60	65	52	50	60.9ᵇ
The Red Sandstone Plain.																																	
Bayonne	Maximum	78	78	91	92	94	93	94	91	90	85	67	73	86	84	80	87	88	88	88	81	80	76	71	71	83	82	74	90	78	80	79	83.0
	Minimum	67	64	72	73	75	72	75	72	66	66	62	63	68	68	69	70	69	70	68	65	66	64	62	62	64	65	72	67	64	66	65	67.5
Boonton§§	Maximum	77	77	92	86	91	93	95	86	86	89	73	70	82	85	83	88	88	89	88	82	76	80	71	76	88	81	85	81	76	80	79	83.0
	Minimum	61	49	61	69	59	58	60	66	66	68	61	61	62	64	57	61	61	60	64	58	62	60	59	59	49	53	61	59	62	55	55	60.0
Canoe Brook§§	Maximum	87	80	93	85	92	94	95	83	88	87	68	72	82	85	81	88	82	88	86	79	73	76	74	76	85	81	82	81	77	81	78	82.5
	Minimum	60	51	64	67	58	60	59	64	65	70	61	62	63	64	66	62	57	58	64	58	61	52	60	58	51	59	62	58	65	54	53	60.2
Elizabeth	Maximum	79	79	95	90	94	91	99	89	90	88	79	70	85	87	82	90	90	91	92	81	75	77	75	77	90	83	88	87	81	85	81	85.2
	Minimum	66	59	72	70	64	64	66	71	67	72	63	62	67	67	69	67	63	65	68	62	66	61	62	61	55	63	66	64	68	60	59	64.8
Flemington	Maximum	81	77	96	92	93	99	99	88	93	85	79	71	85	87	87	91	89	93	91	85	75	75	71	78	89	82	89	85	79	85	85	85.6
	Minimum	61	60	71	70	61	63	64	67	65	72	61	62	65	67	68	64	62	64	68	61	63	59	59	60	54	62	64	58	66	56	56	63.0
Jersey City	Maximum	77	79	93	85	92	94	95	84	88	86	70	71	85	85	81	90	89	90	90	80	74	76	72	75	84	83	84	83	77	83	78	83.0
	Miuimum	66	66	71	72	71	73	74	71	71	68	63	62	68	70	72	69	68	69	68	65	67	63	62	61	62	67	69	66	69	65	64	67.5
Lambertville	Maximum	79	76	95	87	92	95	95	85	92	85	73	69	83	84	84	89	88	88	87	79	72	75	69	76	85	80	85	81	77	81	78	82.7
	Minimum	62	62	71	70	66	66	75	69	66	70	60	60	66	67	69	68	64	65	70	61	63	56	58	59	56	63	65	60	71	58	58	64.3
Little Falls§§	Maximum	81	79	95	89	94	97	99	87	90	90	75	75	86	87	85	90	91	92	89	84	76	79	70	78	89	85	87	83	78	84	80	85.3
	Minimum	62	54	67	69	61	61	63	67	67	71	61	61	62	66	68	63	64	61	65	59	62	56	60	60	51	61	63	60	65	57	55	62.0
New Brunswick	Maximum	80	79	93	92	91	94	96	92	92	87	79	70	82	83	89	88	87	88	87	84	75	74	71	73	85	81	83	81	80	81	79	83.7
	Minimum	62	59	71	71	64	67	66	70	67	72	62	62	67	67	65	67	64	66	68	62	64	59	60	60	55	63	65	63	66	60	58	64.3
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	78	79	94	85	91	95	96	83	89	87	70	70	84	85	82	90	89	90	90	80	72	77	72	76	84	83	84	83	77	83	79	83.1
	Minimum	62	55	69	68	63	64	64	69	66	70	61	61	66	67	67	66	63	63	68	61	61	58	59	59	53	61	64	60	64	59	58	62.9
Ridgefield	Maximum	78	78	94	87	91	95	97	82	86	87	67	69	84	84	83	88	89	90	87	96	73	76	70	75	87	82	81	82	77	82	80	82.8
	Minimum	61	56	70	69	65	65	67	69	69	71	62	61	66	68	70	67	63	64	63	60	61	58	60	57	54	64	66	63	67	60	55	63.6
Somerville	Maximum	78	81	95	89	91	97	98	85	93	90	69	71	82	87	83	90	90	91	91	....	81	....	78	77	89	81	88	84	79	85	82	85.4ᵇ
	Minimum	62	58	72	70	60	64	64	66	65	67	62	62	62	67	68	66	62	63	67	....	69	....	58	58	53	61	62	60	60	57	56	62.8ᵇ
Verona	Maximum	74	75	88	83	88	90	92	80	84	83	67	68	80	81	77	85	84	85	84	78	72	74	69	72	82	78	81	79	73	79	75	79.4
	Minimum	62	57	69	67	65	64	69	68	67	62	61	61	66	67	70	67	63	63	62	61	61	59	59	68	55	64	64	60	67	59	58	63.4
New York, N. Y	Maximum	76	77	90	85	90	92	93	82	85	84	68	72	85	85	78	86	87	87	87	80	75	74	70	72	82	81	82	80	75	78	77	81.1
	Minimum	67	66	72	72	71	73	74	72	71	64	63	62	68	70	72	69	69	70	67	65	68	63	62	61	63	67	69	66	69	65	65	67.6
The Southern Interior.																																	
Belleplain	Maximum	88	82	97	91	88	95	95	90	95	91	80	75	83	84	85	88	87	90	86	79	71	70	66	73	84	83	86	83	80	83	82	84.2
	Minimum	57	57	57	64	66	62	61	61	62	71	59	61	69	63	64	60	62	59	63	62	59	57	55	55	50	58	57	54	64	53	55	59.9
Bridgeton	Maximum	87	84	100	92	92	99	99	97	97	92	72	74	84	85	86	89	90	91	88	78	72	72	66	77	84	84	85	84	81	83	82	85.7
	Minimum	62	62	73	69	70	69	69	67	68	71	62	62	65	69	69	68	66	66	69	65	62	60	58	54	57	62	67	61	68	61	60	64.9
Burlington	Maximum	86	80	96	95	94	96	99	98	96	95	87	70	85	88	83	89	90	92	92	86	80	74	74	75	87	85	87	85	82	84	81	86.8
	Minimum	66	65	65	71	65	64	65	69	67	70	61	62	66	65	69	72	63	63	69	64	67	60	60	59	56	64	65	58	68	67	58	64.6
Clayton	Maximum	84	82	99	95	95	101	101	95	96	90	70	71	83	78	72	90	90	91	87	78	69	71	65	77	84	82	85	93	80	83	83	84.5
	Minimum	64	64	73	69	68	65	64	66	65	67	62	62	67	66	68	67	66	65	68	64	62	61	59	57	56	56	62	60	67	60	58	63.8
Hammonton	Maximum	81	84	101	95	96	100	101	89	98	90	71	71	87	91	87	91	91	93	91	81	70	74	65	76	87	84	89	85	81	84	83	86.0
	Minimum	62	62	73	67	68	66	65	66	63	69	61	62	66	66	62	67	62	63	68	64	63	61	57	56	53	62	62	58	66	59	57	63.1
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	82	81	99	89	93	97	100	86	97	88	70	71	84	87	81	87	87	89	88	78	70	72	66	72	87	83	87	86	82	85	79	84.0
	Minimum	62	61	73	68	66	65	62	65	65	70	62	63	66	68	67	65	62	64	64	63	64	61	60	58	54	63	63	57	67	60	56	63.4
Lakewood	Maximum	85	80	95	91	90	91	95	89	94	87	81	71	83	84	81	87	87	87	86	82	75	73	72	71	83	82	83	83	79	81	77	83.4
	Minimum	63	59	72	69	64	69	67	67	66	73	63	63	66	67	67	66	63	64	65	63	66	62	63	59	51	63	62	60	67	60	57	64.1
Moorestown	Maximum	78	80	98	87	93	94	98	84	97	88	66	69	84	85	80	88	87	89	88	77	67	72	67	75	87	81	85	83	78	83	79	82.8
	Minimum	65	64	74	70	66	67	66	68	66	65	61	62	64	67	69	68	66	63	66	63	63	59	57	59	56	64	64	61	64	60	58	64.0
Pemberton	Maximum	88	84	98	96	95	96	97	97	95	92	85	70	84	86	81	88	88	89	89	83	75	73	70	75	84	83	87	83	83	81	80	85.6
	Minimum	67	64	74	71	67	67	64	68	66	75	63	64	67	68	70	67	65	64	68	63	67	62	59	59	57	64	66	61	68	62	59	65.4
Pleasantville§§	Maximum	78	79	93	87	87	92	92	85	95	84	78	74	83	84	84	89	90	92	92	79	79	73	68	74	87	82	83	68	82	83	82	83.2
	Minimum	63	69	73	67	69	68	66	63	69	73	63	64	67	68	68	65	64	65	66	65	68	65	62	60	50	61	64	59	69	61	56	64.8
Runyon	Maximum	90	81	96	91	94	99	99	95	94	89	80	78	85	86	82	92	91	92	91	88	78	74	76	85	87	84	85	84	80	83	83	86.8
	Minimum	62	54	70	72	65	64	58	66	64	63	62	63	68	63	65	75	68	69	60	59	56	54	56	48	49	61	64	57	65	53	54	61.5
Trenton	Maximum	81	77	95	88	93	94	96	81	93	87	67	70	84	88	82	88	88	88	87	77	69	72	67	73	85	81	85	82	77	81	78	82.4
	Minimum	65	66	73	72	69	69	70	71	69	65	61	62	66	69	69	69	66	68	68	64	64	59	58	59	59	65	67	63	67	63	62	65.7
Tuckerton	Maximum	83	85	95	88	91	87	96	85	96	88	76	80	80	85	85	85	88	92	92	80	76	75	72	70	87	78	80	82	86	82	83	84.1
	Minimum	60	66	70	75	76	70	75	70	72	72	60	70	70	70	60	68	65	70	65	60	65	60	58	60	58	60	60	61	62	60	61	65.5
Philadelphia, Pa	Maximum	80	82	96	88	92	96	98	88	92	87	70	72	83	83	82	89	90	90	86	79	72	75	66	78	86	81	86	83	77	82	80	83.5
	Minimum	69	69	75	76	75	76	76	72	72	67	64	64	68	72	73	72	72	73	71	67	67	62	60	61	64	68	67	66	70	67	66	69.1
The Sea Coast.																																	
Asbury Park	Maximum	77	78	87	85	84	88	94	80	84	82	72	73	79	81	77	89	89	90	83	79	79	73	71	72	84	81	78	78	77	83	80	80.9
	Minimum	68	65	73	70	71	70	71	73	74	72	65	66	70	71	72	70	68	68	72	67	68	66	62	63	59	66	72	66	70	64	63	68.2
Atlantic City	Maximum	75	76	84	82	82	86	83	78	84	82	73	77	79	82	80	85	91	90	82	76	74	71	70	72	85	78	78	77	82	82	82	79.9
	Minimum	69	69	72	73	73	74	74	72	72	70	65	67	72	73	73	70	69	72	71	68	65	66	62	61	64	68	69	67	71	65	66	69.1
Cape May	Maximum	80	80	81	84	82	88	84	85	85	86	74	78	79	80	80	86	86	88	80	78	71	70	67	73	83	78	78	78	78	80	80	80.1
	Minimum	68	70	72	71	72	71	70	70	72	72	64	66	68	71	71	70	70	71	71	68	63	60	62	61	64	66	66	66	69	66	63	67.9
Long Branch	Maximum	78	77	94	84	87	86	95	84	86	85	70	72	88	86	80	87	86	88	86	76	72	73	70	71	86	80	78	78	75	82	80	81.3
	Minimum	61	60	71	70	68	69	68	70	71	63	60	60	66	69	71	71	65	66	70	66	67	64	63	60	55	65	66	62	69	63	60	65.5
Sandy Hook	Maximum	75	76	91	86	89	90	96	79	86	85	69	73	79	80	77	88	86	86	87	77	72	73	70	72	81	78	78	78	76	81	79	80.4
	Minimum	68	67	73	73	71	72	74	72	73	66	63	64	69	71	70	70	70	71	69	69	67	64	61	62	63	67	68	67	69	66	66	68.2

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.208	.160	.232	.238	.240	.272	.272	.288	.210	.528	.096	*	.158	.160	.122	.224	.256	.224	.128	.126	.068	*	*	*	.118	.144	.160	.170	.096	.240	.224	5.362
	Wind movement	47	52	62	46	46	31	38	38	55	62	64	89	23	35	25	39	15	39	21	46	52	109	108	121	52	42	26	30	47	25	33	1518
Runyon	Evaporation	.210	.120	.140	.230	.180	.210	.210	.200	.170	.160	*	*	.080	.060	.000	.150	.180	.180	.200	.170	.030	.120	.030	.080	.100	.150	.080	.120	.150	.150	.120	3.980
	Wind movement	14	10	10	18	7	8	7	8	11	9	29	24	16	8	10	6	4	5	11	9	28	32	30	16	20	9	11	12	11	9	8	412

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVI. SEPTEMBER, 1931. No. 9

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month was the warmest September in a record which goes back to 1885. The average of 70.5 degree exceeded the previous highest average, in 1921, by 0.3 degrees. There were only about six or seven days on which the temperatures were normal or slightly below it, the lowest temperatures being reached on the 29th and ranged between the 35 and 45-degree marks. The highest recorded were generally between 95 and 100 degrees, and were registered mostly on the 11th.

The average amount of rain received was only two-thirds of the normal, and the actual amount was somewhat less over the southern part of the State than over the northern. The main periods of rain were: the 2d over the northern and 3d over the southern portions; the 14th, 15th and 17th in the north and the 17th in the south; general rains on the 26th. Scattered showers on other dates also. There was an abundance of sunshine, and the weather was quite favorable to the maturing and harvesting of crops.

No damaging frosts, winds, or hail storms were reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 70.5°, which was 5.0° above normal. The highest temperature was 100° at Flemington and Tuckerton on the 11th, and the lowest, 34°, at Layton. Canoe Brook and Runyon on the 29th. The greatest daily range of temperature was 46° at Runyon on the 8th. The highest monthly mean temperature was 73.2° at Bridgeton, and the lowest, 66.9° at Layton.

The temperature departure from the normal for the year, 1931, to date, by sections, is: The Highlands, +2.0°; Red Sandstone Plain, +2.1°; Southern Interior, +1.5°; Sea Coast, +2.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 1.98 inches, which was 1.54 inches below normal. The greatest monthly precipitation was 3.15 inches, at Sussex, and the least, 0.86 inch at Runyon. The greatest amount of precipitation in any 24 consecutive hours was 2.60 inches at Cape May on the 26th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 6, or 2 less than normal.

The precipitation accumulated departure from the normal for the year, 1931, to date, by sections, is: The Highlands, —1.94 inches; Red Sandstone Plain, —3.37 inches; Southern Interior, —4.25 inches; Sea Coast, —7.14 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 12 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 38 miles per hour from the south at Atlantic City on the 20th.

MISCELLANEOUS.

The per cent of possible sunshine was 71, or 3 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.00 inches, or 0.07 inch below normal. The highest reading was 30.52 inches at Long Branch, Trenton and Verona on the 30th, and the lowest 29.62 inches at Long Branch on the 26th.

The mean stage of the Delaware River at Phillipsburg was 0.6 foot, and the highest 1.1 feet on the 3d and 4th. The mean stage at Trenton was 0.2 foot, and the highest 0.6 foot on the 1st, 2d, 3d, 4th and 6th. The normal stage at Trenton is 1.1 feet.

Dense fog was reported on the following dates from scattered stations throughout the State: 5, 12, 13, 14, 21, 22 and 23. Thunderstorms occurred on the following dates: 2, 3, 4, 6, 10, 14, 15, 17, 18, 20, 21, 22 and 26. Hail was reported in light amounts on the 14th from two stations, namely Plainfield and Flemington. In the northwest part of the State a light frost was experienced on the 29th.

ERRATA.

March 1931. Asbury Park mean minimum temperature should be 34.3° and monthly mean temperature 40.7°. Hightstown mean maximum temperature should be 47.0° and the monthly mean temperature 38.9°.

April 1931. Boonton, greatest amount of precipitation in 24 hours should be 1.07 inches on the 27th. Long Branch, number of partly cloudy days should be 4, and number of cloudy days 12. Somerville, mean maximum temperature should be 62.7°, and mean monthly temperature 50.0°.

August 1931. Sandy Hook, greatest precipitation in 24 hours should be 1.88 inches on the 10-11th. Atlantic City, greatest precipitation in 24 hours should be 2.11 inches on 23-24th.

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COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	64.2	93	38	0.83	1.69	0.25	......	......	......	......
1886	66.9	95	36	1.13	1.76	0.86	......	......	......	......
1887	61.6	90	30	3.66	6.25	1.62	......	......	......	7
1888	63.1	84	29	7.09	10.65	3.75	......	......	14	12
1889	64.8	90	34	**8.36**	**13.13**	3.17	......	......	14	14
1890	64.4	91	33	4.75	8.61	2.59	10	10	10	10
1891	68.7	95	38	2.46	5.91	0.90	16	9	5	6
1892	64.2	90	33	1.81	3.78	1.02	15	11	4	6
1893	62.7	90	31	3.20	5.38	1.93	12	10	8	8
1894	68.8	97	31	7.46	11.65	3.69	10	10	10	8
1895	69.7	**109**	29	1.07	2.71	0.22	17	10	3	5
1896	65.1	95	30	4.37	8.74	2.26	19	7	4	5
1897	65.5	99	30	1.65	3.97	0.21	19	7	4	5
1898	68.6	100	31	2.00	3.87	0.65	17	8	5	6
1899	64.4	93	30	5.88	9.61	2.88	15	9	6	9
1900	69.9	98	32	2.86	7.37	1.09	14	10	6	6
1901	66.8	94	29	3.38	6.82	1.63	15	9	6	10
1902	64.6	93	30	5.65	8.95	3.11	11	7	12	13
1903	65.0	92	29	3.34	7.10	1.39	17	8	5	7
1904	64.8	93	**23**	4.79	10.08	0.89	14	10	6	7
1905	65.4	90	28	5.23	9.18	2.87	16	7	7	8
1906	68.9	94	33	2.19	4.66	0.75	15	9	6	7
1907	67.1	92	31	8.08	12.95	3.55	10	8	12	14
1908	65.7	90	29	2.09	4.13	0.95	11	10	9	3
1909	64.5	89	30	3.30	4.58	2.08	11	10	9	8
1910	67.3	97	32	2.39	3.97	1.01	12	10	8	6
1911	66.4	90	30	2.88	5.33	1.08	10	12	8	9
1912	65.9	87	28	4.47	6.76	2.68	12	7	11	10
1913	64.4	96	27	3.87	6.55	1.56	13	8	9	9
1914	64.0	99	24	**0.37**	1.64	**0.14**	21	6	3	3
1915	68.5	97	30	2.08	4.46	0.55	17	9	4	5
1916	65.2	98	31	2.84	5.29	1.29	20	7	3	6
1917	**61.5**	87	27	2.74	6.13	0.47	16	7	7	6
1918	62.2	90	29	3.84	6.00	2.66	14	8	8	9
1919	65.8	96	32	3.26	6.28	1.04	16	6	8	8
1920	66.8	90	30	3.87	8.53	1.67	17	8	5	7
1921	70.2	99	36	2.35	5.04	0.80	15	8	7	8
1922	66.7	95	27	2.26	5.22	0.59	19	5	6	4
1923	67.0	90	28	3.78	6.26	2.24	14	8	8	7
1924	62.2	99	29	5.42	8.41	2.47	13	8	9	10
1925	67.8	96	25	2.92	5.81	0.64	11	11	8	7
1926	64.5	93	32	4.18	7.09	1.53	14	6	10	10
1927	65.6	97	29	2.66	5.03	0.65	19	6	5	5
1928	62.6	90	29	4.52	9.62	1.54	12	8	10	10
1929	67.0	100	28	4.74	8.24	2.12	14	7	9	8
1930	69.4	95	32	2.14	4.96	0.44	16	9	5	8
1931	**70.5**	100	34	1.98	3.15	0.86	19	6	5	6
Normal	65.5	....	....	3.52	....	....	15	8	7	8
Extremes	....	109	23	....	13.13	0.14	......	......	......	......

W. B. O. Philadelphia-10-23-31-830.

Climatological Data for September, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	71.3^{c}	+6.6	99	11	38	29	39^{c}	1.50	−2.27	0.46	0	7	20	2	8	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	67.8	+5.9	94	10†	35	29†	40	1.61	−2.81	0.54	0	7	22	2	6	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	.....	.....	41	25	....	2.70	−1.84	1.41	0	6	19	5	6	e.	Brice E. Riker.
Dover	Morris	600	47	67.2	+5.0	93	11	39	30	33	2.51	−1.58	1.29	0	6	9	14	7	......	William C. Harris
Layton	Sussex	480	30	66.9	+4.6	96	10	34	29	40	3.07	−0.85	1.26	0	7	14	6	10	sw.	A. M. Depue.
Long Valley	Morris	520	1	68.4	......	93	11	36	30	36	1.81	....	0.80	0	6	23	4	3	w.	S. N .Dilts.
Newton	Sussex	769	47	68.4^{c}	+4.9	97	23	37	29	39^{c}	2.69	−1.12	1.21	0	5	15	7	8	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	70.1	+4.9	98	11	42	29†	37	2.14	−1.52	0.72	0	6	19	7	4	......	Town Engineer.
Sussex	Sussex	442	36	68.0^{a}	+3.8	96	10	37	30	42	3.15	−0.75	1.57	0	9	19	4	7	n.	A. J. W. Mowatt
Means and extremes	......	......	....	68.5	+5.1	99	11	34	29	42	2.35	−1.59	1.57	0	7	18	6	6	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	......	......	.....	.....	.....	.....	....	......	....	......	......	....	....	....	....	......	William Mann.
Boonton	Morris	400	§41	68.3	......	94	11	39	30	41	2.82	−1.31	1.63	......	9	18	2	10	sw.	John Kline.
Canoe Brook	Essex	173	1	68.2	......	95	11	34	29	39	2.21	....	1.18	......	9	18	6	6	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	.....	.....	.....	.....	....	2.89	−1.40	1.33	0	9	22	4	4	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	71.6	+4.9	98	11†	42	29	36	1.95	−1.82	0.60	0	8	20	4	6	w.	Union County Park Com.
Flemington	Hunterdon	140	§45	71.4	+5.1	100	11	43	29	39	2.83	−1.07	0.94	0	8	21	5	4	sw.	Hiram E. Deats.
Jersey City	Hudson	10	33	72.2	+5.0	96	11	49	25	25	1.17	−2.18	0.41	0	6	16	8	6	sw	S. K. Pearson.
Lambertville	Hunterdon	430	44	70.4	......	95	11	40	29	32	1.76	−2.13	0.78	0	9	21	4	5	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	70.5	+6.4	98	11	40	29†	38	2.75	−0.83	1.99	0	9	15	10	5	nw.	Passaic Consolid. Water Co
New Brunswick	Middlesex	110	78	70.9	+5.3	96	11	44	29	32	1.16	−2.44	0.48	0	5	18	9	3	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	.....	.....	.....	.....	....	2.48	....	1.56	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	......	......	.....	.....	.....	.....	....	......	....	......	......	....	....	....	....	......	Vincent A. Messineo.
Plainfield	Union	120	43	70.1	+4.5	97	11	42	29†	33	2.73	−1.64	1.23	0	7	11	13	6	sw.	S. K .Pearson.
Ridgefield	Bergen	80	14	69.8	......	96	11	42	29	33	2.02	....	0.66	0	6	16	8	6	n.	George P. Kirsten.
Somerville, near	Somerset	70	48	69.8	+3.8	96	11	39	29	39	2.17	−1.48	0.78	0	6	15	5	10	nw.	Julius Gerlich.
Verona	Essex	490	5	68.6	......	92	11	41	29	34	2.09	....	1.20	0	8	17	7	6	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	.....	.....	.....	.....	....	1.58	....	0.97	......	7	....	..	....	......	Hackensack Water Co.
New York, N. Y.	......	365	61	71.2	+4.4	95	11	48	29	23	1.15	−2.24	0.45	0	6	14	9	7	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	70.2	+5.0	100	11	34	29	41	2.17	−1.63	1.99	0	8	17	7	6	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	71.2^{c}	+4.7	98	11†	44	8	40	2.00	−1.39	1.74	0	4	13	7	10	s.	A. F. Waldron.
Bridgeton	Cumberland	30	48	73.2	+5.0	98	12	44	29	32	1.58	−1.73	1.19	0	3	23	4	3	sw.	Bennett K. Matlack
Burlington	Burlington	12	§45	73.0	+6.2	98	11	46	29†	34	1.07	−2.44	0.73	0	6	19	6	5	sw.	Public Service Power Co.
Clayton	Gloucester	134	31	72.0	+5.2	99	11†	42	25†	34	1.84	−1.60	1.45	0	5	26	2	2	nw.	G. E. Lamh.
Freehold	Monmouth	......	....	......	......	.....	.....	.....	.....	...	1.51	−2.78	0.70	0	6	20	5	5	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§25	71.8	......	99	11	39	29	36	1.67	−1.52	1.52	0	6	23	4	3	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	120	37	......	......	.....	.....	.....	.....	....	......	....	......	......	...	....	....	....	......	Charles Welsh.
Indian Mills‡‡	Burlington	76	42	71.6	+5.5	99	22	39	29	40	1.63	−2.28	1.40	0	4	18	6	6	sw.	James M. Armstrong.
Lakewood	Ocean	54	27	70.3	+5.7	93	11	41	29	33	1.63	−1.16	1.12	0	6	21	3	6	sw.	R. W. Holman.
Moorestown	Burlington	......	68	71.3	+5.3	97	11	44	29	31	1.72	−1.91	0.80	0	6	20	4	6	nw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	24	......	......	.....	.....	.....	.....	....	2.03	−0.47	1.38	0	6	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	72.3	......	95	11†	43	29	31	1.18	....	0.87	0	5	20	4	6	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	26	§33	71.9^{a}	......	99	11	41	29	34	2.56	−0.56	1.58	0	7	25	2	3	s.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	69.2	......	98	11	34	29	46	0.86	....	0.45	0	3	21	8	1	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	71.4	+4.5	95	11	46	29	28	1.06	−2.34	0.66	0	4	16	7	7	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	.....	.....	.....	.....	....	0.99	....	0.59	0	6	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	71.2	+5.0	100	11†	45	30	42	2.55	−0.51	1.50	0	4	24	0	6	nw.	John H. Brown.
Philadelphia, Pa	......	117	60	74.1	+6.1	97	11	50	29	23	1.60	−1.54	0.97	0	4	13	10	7	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	71.6	+5.2	100	11†	34	29	46	1.62	−1.59	1.74	0	5	21	4	5	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	72.2	+5.4	97	11	47	29	27	1.24	−1.75	0.71	0	4	26	3	1	sw.	Information Bureau.
Atlantic City	Atlantic	16	58	72.3	+5.5	94	11	49	29	24	2.55	−0.10	1.85	0	5	17	8	5	sw.	U. S. Weather Bureau.
Cape May	Cape May	17	47	72.4	+3.4	93	11	48	29	25	3.13	+0.13	2.60	0	6	14	11	5	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	69.8	+3.9	96	11	46	29	30	1.43	−1.63	0.87	0	4	18	6	6	s.	William D. Martin.
Sandy Hook	Monmouth	22	33	71.9	+4.8	94	11	53	29	21	0.97	−2.46	0.42	0	7	15	8	7	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	71.7	+4.6	97	11	46	29	30	1.86	−1.16	2.60	0	5	18	7	5	sw.	
For the State	......	......	....	70.5	+5.0	100	11†	34	29	46	1.98	−1.54	2.60	0	6	19	6	5	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used i determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield i Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlottehurg is Newfoundland.

Daily Precipitation for September, 1931

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		.15	.46												.15		.12	.10		.15				T.		.37						1.50
Charlotteburg	Passaic			.54											.37			.08	.05		.20		.02				.35						1.61
Culvers Lake	Delaware		T.	1.41											.80			.06			.03				T.		.35		.05				2.70
Dover	Passaic		.64	.02											1.28	.01		.30									.26						2.51
Layton	Delaware		.48	1.26											.02	T.		.05			.51	.20					.55						3.07
Long Valley	Morris		.04	.76											.21	.32					.13						.35						1.81
Newton	Delaware		.05	1.21										.66				.36									.41						2.69
Phillipsburg	...do		.55	.12											.72	T.	T.	.13			T.	.24	T.		T.		.38						2.14
Sussex	Hudson		.16	1.57		.09									.37			.11			.49	.03					.30	.03					3.15
The Red Sandstone Plain.																																	
Bayonne	Coast																																......
Boonton ‖	Passaic			1.63	.02											.79		.07	.03			.07	.01				.18	.02					2.82
Canoe Brook ‖	Essex			1.18	.12	T.										.43		.11	.09			.01	.01				.25	.01					2.21
Chatham ‖	...do			1.33	.17											.33		23	.26			.09	.05				.19	.24					2.89
Elizabeth	Coast			.56		.01									.30	.01		.10	T.		.60		.02				.35	T.					1.95
Flemington	Raritan		.62	.94		T.									.51	.02	T.	.03	.33		T.		.02		T.		.36						2.83
Jersey City	Coast		.34	.12	T.		T.							T.	.01		T.	.41			T.	T.	.01				.28	T.	T.				1 17
Lambertville	Delaware		.05	.54	.10											.06	.02	.03	.14		T.	.04			T.		.78						1.76
Little Falls. ‖	Passaic			1.99	.03											.25		.08	.09			.08	.01				.21	.01					2.75
New Brunswick	Raritan		T.	.48	.01									T.		T		.02	.21				T.		T.		.44						1.16
New Milford ‖	Hackensack			1.56	.03											.08		.09	.11			.39	.02				.17	.03					2.48
Paterson	Passaic																																......
Plainfield	Raritan		.55	.29	.03										1.23			.19			.05						.39						2.73
Ridgefield**	Hackensack		.20	.66											.22			.59			.08						.27						2.02
Somerville	Raritan		.36	.78											.51				.10				.02				.40						2.17
Verona**	Passaic		.84	.36											.51		.01	.09			T.	.01	.01				.26						2.09
Woodcliff Lake ‖	Hackensack			.97												.14		.12	.03			.14	.03				.15						1.58
New York, N. Y***	Coast		.32	.13	T.		T.						T.	T.	.01		T.	.39			T.	T.	.01			T.	.29	T.	T.				1.15
The Southern Interior.																																	
Belleplain	Tuckahoe			.22	.04																							1.74	T.				2.00
Bridgeton	Coast			.11																	.28				T.			1.19	T.				1.58
Burlington	Delaware			.06		T.										T.		.20	T		.05		.02		T.		.73		.01				1.07
Clayton	...do			.06			.11										.20				.02						1.45						1 84
Freehold	Raritan				.18													.06	.40					.01			.70	.16					1.51
Hammonton	Mullica			.04	.03		.04											.02							T.		1.52	T	.02				1.67
Hightstown	Raritan																																......
Indian Mills	Mullica			.08														.07									1.40		.08				1.63
Lakewood	Metedeconk			.07														.08	.22		.02						1.12		.12				1.63
Moorestown ‖	Delaware			T.	.09	.24										T.		.23	T.			.16	T.				.80		.20				1.72
Northfield	Coast			.17	.13													T.			.05						1.38	.09	.21				2.03
Pemberton				.01		T												.20	T.		.03		T.				.87		.07				1.18
Pleasantville ‖	Coast				.36													.01				.03					.20	1.58	.35	.03			2.56
Runyon	Coast			.10															.31								.45						0.86
Trenton***	Delaware		T.	.15									T.	T.	T.			.21			.04	T.	T.	T.	T.		.66	T.	T.				1.06
Trenton No. 2 ‖	...do			.02	.17													.17				.04				T.	.49	.10					0.99
Tuckerton	Coast			.03	1.00													.02									1.50						2.55
Phila., Pa***	Delaware		T.	.10											T.			.37			.16			T.	T		.97						1.60
The Sea Coast.																																	
Asbury Park	Coast			.29														.04	.20								.71						1.24
Atlantic City***	...do			.57														T.	T.		.01		.01	T.			1.85	T.	.11				2 55
Cape May	...do			.38	.08	T.													T.		.06			T.	T.		2.49	.11	.01				3.13
Long Branch**	...do			.30												T.		.23					.03				.87						1.43
andy Hook***	...do			.21	T.											T.	.03	.03			.01	T	.01				.42	.26					0.97

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-tation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.01	30.49	30	29.66	26	14.0	38	s.	20	79	68	78	73
ong Branch	30.01	30.52	30	29.62	26	......	......	......	......	70	60	68	......
oorestown	......	......	......	......	......	......	......	......	......	77	55	77	......
ew York, N. Y	30.00	30.50	30	29.66	26	12.7	46	nw.	24	77	60	67	72
hiladelphia, Pa	30.03	30.54	30	29.67	26	11.5	36	nw.	24	73	54	64	68
idgefield	30.00	30.50	30	29.67	26	......	......	......	......	......	......	......	......
andy Hook	29.99	30.51	30	29.65	26	12.6	37	nw.	24	78	64	76	62
renton	30.01	30.52	30	29.64	26	8.1	28	nw.	29	77	56	71	77
erona	......	30.52	30	29.63	26	......	30	n.	24	74	51	74	......

Daily Temperatures for September, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	85	90	....	....	....	88	80	85	94	98	99	92	93	95	87	79	79	84	79	77	92	95	90	75	73	79	75	66	73	78	....	84.4
	Minimum	48	67	68	....	....	62	53	48	55	62	62	64	68	66	68	67	61	56	55	58	65	66	65	63	45	56	50	55	38	40	....	58.2
Charlotteburg	Maximum	78	83	87	82	80	82	80	79	88	94	64	88	87	90	70	79	75	77	77	73	82	93	92	85	68	67	73	68	70	75	....	80.7
	Minimum	40	62	58	49	50	57	58	53	55	55	61	64	65	64	63	65	57	55	48	59	61	68	62	53	38	52	52	49	35	35	....	54.8
Dover	Maximum	78	86	70	77	77	81	73	78	87	92	93	82	85	89	82	75	69	78	71	72	79	90	84	72	67	68	73	64	69	72	....	77.8
	Minimum	45	56	64	53	55	60	55	55	56	62	63	66	66	69	68	64	59	57	54	57	63	63	65	53	43	54	53	43	40	39	....	56.7
Layton	Maximum	80	83	72	79	80	86	68	80	90	96	95	90	86	90	80	78	70	78	74	74	84	92	83	70	68	67	74	63	62	74	....	78.9
	Minimum	44	67	61	54	54	58	54	60	50	59	58	61	62	66	63	63	60	55	46	51	62	65	62	54	36	52	50	50	34	36	....	54.9
Long Valley	Maximum	80	86	78	80	80	82	74	85	88	92	93	87	88	91	85	76	70	78	73	75	85	92	86	76	67	72	73	67	70	72	....	80.0
	Minimum	44	65	60	50	52	73	53	52	54	58	66	62	65	65	64	64	60	60	62	54	62	64	64	61	44	54	53	57	40	36	....	56.9
Newton	Maximum	78	86	74	79	82	85	77	78	89	94	96	87	91	83	79	80	84	....	....	....	88	90	97	80	72	68	74	67	73	76	....	81.7
	Minimum	46	66	61	52	53	61	51	48	55	62	63	61	65	66	63	64	63	....	....	....	49	61	63	54	38	52	48	43	37	40	....	55.0
Phillipsburg	Maximum	85	90	73	81	81	87	80	85	93	97	98	88	91	93	86	78	72	81	75	75	89	94	86	74	69	71	72	65	71	73	....	81.8
	Minimum	48	66	63	57	57	64	54	52	58	62	63	64	68	66	67	67	62	59	56	60	63	66	64	57	47	57	52	49	42	42	....	58.4
Sussex	Maximum	....	87	73	81	80	82	73	79	88	96	94	91	89	91	81	79	74	75	75	74	80	91	87	77	67	69	71	67	68	75	....	79.8
	Minimum	....	45	62	52	54	62	53	46	54	60	61	64	64	61	65	65	60	55	50	55	64	64	64	60	39	54	50	58	56	37	....	56.3
The Red Sandstone Plain.																																	
Bayonne	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Boonton§§	Maximum	79	91	73	81	79	84	77	80	88	93	94	87	86	91	84	80	72	79	75	76	84	91	83	87	69	71	78	67	72	75	...	80.9
	Minimum	45	50	66	53	53	58	59	50	53	59	62	63	63	63	66	65	60	58	50	54	59	63	64	61	42	47	53	53	40	39	....	55.7
Canoe Brook§§	Maximum	78	88	77	81	82	84	76	80	89	94	95	83	89	92	85	78	72	79	74	76	84	92	87	76	73	72	74	66	72	74	....	80.7
	Minimum	48	55	68	54	56	60	49	48	53	59	60	62	65	65	66	63	60	57	51	51	62	65	64	62	42	53	53	53	34	35	...	55.8
Elizabeth	Maximum	80	91	76	81	80	87	82	83	93	97	98	84	93	98	86	81	76	84	75	78	83	96	92	77	74	70	81	72	74	76	....	83.3
	Minimum	52	69	67	58	58	64	52	51	57	64	68	68	69	66	70	70	62	60	59	54	65	66	66	65	47	49	58	55	42	46	....	59.9
Flemington	Maximum	88	91	75	86	83	88	78	82	95	98	100	87	92	94	87	81	74	83	77	75	85	95	90	79	71	73	75	65	74	79	....	83.3
	Minimum	49	68	67	57	58	63	56	53	56	63	64	67	67	65	67	68	61	59	57	54	67	65	67	64	45	55	56	55	43	45	....	59.4
Jersey City	Maximum	80	87	75	80	81	85	76	81	89	94	96	84	90	92	84	79	77	79	75	75	80	92	85	80	70	72	74	70	72	71	....	80.8
	Minimum	63	70	66	63	63	66	60	60	65	72	76	67	68	71	74	65	62	64	62	62	65	67	69	62	49	59	59	53	48	56	....	63.5
Lambertville	Maximum	85	89	78	85	81	83	77	82	89	94	95	89	90	93	85	78	74	80	74	76	91	94	84	75	70	71	74	66	72	75	....	81.6
	Minimum	53	58	62	55	60	65	54	53	61	68	71	72	67	68	69	64	60	59	56	56	66	65	67	53	44	55	54	51	40	47	....	59.1
Little Falls§§	Maximum	82	91	75	84	84	87	86	84	92	97	98	88	90	93	86	83	73	82	78	77	81	94	90	78	74	73	78	73	74	78	....	83.2
	Minimum	48	62	65	54	56	61	54	51	56	61	64	65	60	68	68	65	60	57	53	54	61	64	67	64	44	54	55	53	40	40	....	57.8
New Brunswick	Maximum	83	87	75	78	80	85	82	81	89	94	96	90	89	91	85	81	76	79	75	76	83	92	90	80	68	71	73	69	71	74	....	81.4
	Minimum	52	70	67	58	58	65	55	51	57	64	69	68	68	68	70	68	62	61	58	53	66	66	68	65	48	56	56	55	44	47	....	60.4
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	83	88	74	81	81	85	75	81	89	95	97	85	90	94	84	79	78	79	72	75	85	93	85	80	70	76	76	74	72	72	...	81.6
	Minimum	50	64	66	57	56	62	52	50	56	62	65	67	67	65	68	68	60	59	56	52	65	67	68	62	46	58	55	50	42	42	....	58.6
Ridgefield	Maximum	78	89	73	80	82	85	79	82	90	95	96	81	89	92	86	77	73	79	73	74	72	93	86	77	72	71	75	66	75	74	....	80.5
	Minimum	50	69	61	57	59	59	55	51	58	65	68	69	68	69	72	67	61	60	55	56	66	65	66	54	44	59	58	47	42	46	....	59.1
Somerville	Maximum	86	90	76	81	84	86	78	82	90	95	96	86	90	94	86	80	75	80	74	76	87	95	88	78	71	73	76	66	74	74	....	82.2
	Minimum	47	65	66	54	56	64	54	49	54	64	66	67	69	67	67	66	62	58	55	53	53	66	66	59	42	56	53	49	39	40	....	57.5
Verona	Maximum	78	85	73	76	80	82	73	88	86	91	92	82	85	89	82	76	70	76	70	73	80	89	83	74	66	68	71	63	69	70	....	78.0
	Minimum	50	68	60	56	58	61	54	54	61	66	70	72	67	70	70	62	60	59	56	56	65	66	67	53	45	57	57	49	41	46	....	59.2
New York, N. Y.	Maximum	75	85	75	78	79	83	75	80	88	92	95	83	87	89	82	79	74	77	70	74	77	89	84	76	67	69	72	63	70	70	....	78.6
	Minimum	63	71	66	63	64	67	60	61	66	73	77	67	68	72	74	65	62	64	62	63	65	66	70	56	49	59	59	53	48	57	....	63.7
The Southern Interior.																																	
Belleplain	Maximum	85	89	82	80	....	87	79	80	87	93	98	98	92	91	88	80	85	84	76	80	93	95	90	82	71	71	71	....	70	72	....	83.9
	Minimum	45	62	65	55	...	51	48	44	53	63	70	66	55	59	57	62	58	58	62	61	55	55	53	61	63	....	63	..	64	64	....	58.4
Bridgeton	Maximum	84	91	80	84	82	87	79	83	89	94	96	98	92	92	87	81	85	85	79	79	95	97	91	82	77	73	75	67	73	76	....	84.
	Minimum	56	69	65	59	59	68	56	53	61	65	68	68	68	70	71	67	65	69	68	59	66	66	73	68	45	57	55	55	44	48	....	62.0
Burlington	Maximum	85	91	90	82	83	88	78	84	92	96	98	96	93	93	91	86	79	79	78	78	81	96	95	87	73	70	74	66	72	74	....	84.2
	Minimum	54	71	68	59	58	60	62	60	58	64	66	67	70	68	72	70	62	65	60	65	57	68	71	66	49	57	59	57	46	46	....	61.8
Clayton	Maximum	84	88	78	83	82	86	80	83	90	94	99	99	95	91	52	89	86	86	79	77	85	92	93	89	73	71	75	68	74	78	....	84.6
	Minimum	51	68	67	57	56	67	52	53	60	63	68	66	68	70	69	64	62	60	57	57	65	69	63	63	42	54	54	50	42	44	....	59.4
Hammonton	Maximum	86	91	86	81	85	89	79	82	92	96	89	96	95	92	90	78	83	83	78	77	94	98	91	85	72	72	74	65	72	77	....	84.6
	Minimum	50	69	66	56	55	66	51	47	57	64	68	67	68	69	71	66	61	62	56	53	64	68	69	61	40	54	54	53	39	43	....	58.9
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	87	92	81	81	85	88	77	80	91	98	97	92	95	94	90	78	81	80	77	77	92	99	88	81	74	71	73	68	69	77	....	83.8
	Minimum	49	69	68	58	55	66	51	46	51	61	68	65	69	68	70	68	61	66	57	55	66	69	71	65	41	57	55	53	39	43	....	59.9
Lakewood	Maximum	80	89	85	76	81	85	79	78	86	92	93	86	88	90	87	80	80	78	76	77	82	92	87	79	68	70	72	65	69	67	....	80.6
	Minimum	50	70	68	60	55	67	54	47	55	63	69	67	69	68	72	68	63	62	57	51	67	68	69	66	44	54	55	56	41	44	....	60.0
Moorestown	Maximum	84	90	76	81	82	85	76	81	91	94	97	92	93	91	86	77	79	79	76	80	92	95	87	80	69	71	73	66	71	73	....	82.2
	Minimum	53	72	63	58	58	64	56	52	61	65	68	69	68	68	72	65	61	66	59	57	69	68	69	54	46	58	56	48	44	46	....	60.4
Pemberton	Maximum	84	89	89	80	83	85	84	81	88	93	95	95	92	91	91	86	79	81	77	77	90	94	91	83	11	80	73	68	70	73	....	83.4
	Minimum	53	70	70	59	58	67	55	54	57	63	67	67	69	69	72	69	62	64	58	56	66	69	71	66	47	56	57	56	43	46	....	61.2
Pleasantville§§	Maximum	81	90	83	79	83	88	....	83	90	94	99	93	98	90	90	77	81	81	74	77	92	98	88	87	72	73	75	65	71	70	....	83.2
	Minimum	49	62	72	60	54	64	52	49	57	65	71	69	71	71	72	68	67	69	56	61	67	65	70	69	42	50	56	56	41	44	....	60.0
Runyon	Maximum	87	89	81	80	85	86	84	86	94	97	98	90	92	94	88	82	81	84	84	83	85	94	90	79	76	72	78	77	75	77	....	84.9
	Minimum	46	52	68	59	52	54	44	40	54	59	65	59	60	84	86	68	54	57	60	46	50	66	65	44	41	48	54	40	34	35	....	53.5
Trenton	Maximum	85	88	76	80	81	84	76	80	87	93	95	86	89	90	84	78	76	78	72	75	88	93	90	77	68	61	74	67	70	73	....	80.8
	Minimum	57	71	65	59	62	66	59	56	66	69	72	68	68	69	73	66	61	64	60	61	67	66	70	56	49	58	57	50	46	50	....	61.9
Tuckerton	Maximum	82	91	85	80	80	80	82	82	92	94	100	92	93	90	82	78	79	72	72	80	93	100	95	82	75	71	72	73	72	72	....	83.0
	Minimum	65	70	59	60	58	60	65	56	50	55	60	60	70	62	65	60	60	50	55	60	58	65	62	65	55	60	58	61	49	45	....	59.5
Philadelphia, Pa.	Maximum	85	89	76	80	81	88	78	81	90	95	97	95	90	90	85	80	78	80	76	75	92	94	88	80	69	72	72	67	72	74	....	82.5
	Minimum	64	73	68	64	66	70	62	62	68	73	78	72	70	73	75	69	65	68	64	65	70	71	74	60	54	62	59	54	50	55	....	65.9
The Sea Coast.																																	
Asbury Park	Maximum	77	91	79	75	78	86	79	81	90	92	97	86	80	90	89	81	79	78	72	77	80	89	85	79	67	81	74	65	72	67	....	80.
	Minimum	61	72	68	65	63	70	59	55	63	70	73	69	70	71	75	69	66	65	64	65	67	63	71	60	51	60	60	57	47	55	....	64.
Atlantic City	Maximum	80	82	83	74	78	87	78	80	88	85	94	90	82	81	81	74	78	78	71	74	86	87	82	84	66	72	75	64	67	68	....	79.0
	Minimum	62	74	67	64	67	70	62	57	64	72	75	70	70	74	73	69	69	68	65	68	71	73	73	60	52	65	59	54	49	52	....	65.6
Cape May	Maximum	79	85	83	77	79	86	75	77	84	84	93	91	83	88	84	78	79	80	74	76	88	81	84	83	69	72	71	64	68	71	....	79.
	Minimum	62	74	68	63	65	72	60	59	66	70	74	73	71	73	72	68	70	62	59	69	72	72	72	58	52	66	62	53	48	50	....	65.
Long Branch	Maximum	80	93	75	72	74	82	75	80	86	95	96	75	78	92	86	74	78	75	70	75	76	95	85	76	65	66	67	61	70	62	....	77.8
	Minimum	62	71	65	62	59	63	56	53	58	65	69	66	68	70	74	69	65	64	63	59	67	70	70	56	50	56	55	54	46	49	....	61.8
Sandy Hook	Maximum	76	88	77	76	80	84	76	79	86	92	94	77	78	88	84	76	77	78	70	76	79	89	85	77	67	70	74	65	70	68	....	78.6
	Minimum	64	73	67	65	64	68	62	62	66	71	73	70	70	72	75	65	64	68	63	65	67	68	71	60	54	61	62	58	53	58	....	65.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.192	.272	.104	.240	.192	.224	.256	.240	.224	.224	*	.240	.240	.192	.160	.138	.096	.256	.224	.062	.208	.192	.272	.304	.168	.108	.142	.126	.144	.128	....	5.5
	Wind movement	31	63	97	47	26	51	51	49	39	31	40	15	60	48	65	47	91	48	51	74	56	48	47	51	83	61	39	68	64	43	....	15
Runyon	Evaporation	.160	.165	.100	.120	.120	.120	.180	.180	.180	.220	.185	.180	.175	.180	.135	.135	.120	.130	.160	.160	.160	.120	.150	.180	.180	.100	.120	.120	.120	.080	....	4.4
	Wind movement	15	27	11	20	27	26	74	60	22	18	7	21	20	25	25	34	26	12	26	22	27	22	18	30	24	15	17	23	20	15	....	7

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followi record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVI. OCTOBER, 1931. No. 10

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

During the past forty-seven years there have been but three Octobers warmer than this one, namely, October, 1900, with an average temperature of 59.9 degrees, and those in 1919 and 1920 with means of 59.0 degrees. This month the average was 58.3 degrees. The main warm spells came from the 2d to 8th, inclusive, 15th-16th, and from the 21st to 29th, inc., with the highest temperatures in the eighties and recorded mostly on the 5th and 6th. The lowest points were in the low thirties and were reached quite generally on the 19th, with some cases in the more northern part of the State coming on the 13th.

The average amount of rainfall was about three-fourths of the normal, the southern half of the state, excepting the sea coast section, receiving more than the northern half. There were about eight days with rain distributed throughout the month as follows: 7th to 9th inc., 15th and 16th, 25th, and the 29-30th. All were of good amounts except the rain on the 25th. Thunderstorms were somewhat numerous for this late in the season, and rather general hail fell on the 30th, but no damage was done because of the small size of the stones.

The growing season was extended beyond the usual closing dates, except in the most northern portion where killing frosts occurred as early as the 10th. The crop season, as a whole, has been marked by rather abundant yields due to the favorable weather,— a distinct contrast to the unfavorable conditions of the preceding one.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 37 stations, was 58.3°, which was 3.4° above normal. The highest temperature was 92° at Canoe Brook on he 8th, and the lowest, 24°, at Layton on the 13th. The greatest daily range of temperature was 49° at Runyon on the 13th. The highest monthly mean temperature was 62.1° at Bayonne, and the lowest, 52.0° at Layton.

The temperature departure from the normal for the year, 1931, o date, by sections, is: The Highlands, +2.1°; Red Sandstone Plain, +2.3°; Southern Interior, +1.7°; Sea Coast, +2.3°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 2.76 inches, which was 0.99 inch below normal. The greatest monthly precipitation was 4.69 nches, at Bayonne, and the least, 1.67 inches at Culvers Lake. The greatest amount of precipitation in any 24 consecutive hours vas 1.83 inches at Hammonton on the 29th. The mean of the umber of days on which 0.01 inch or more of precipitation fell vas 8, or normal.

The precipitation accumulated departure from the normal for he year, 1931, to date, by sections, is: The Highlands, —2.44 nches; Red Sandstone Plain, —4.31 inches; Southern Interior, —4.84 inches; Sea Coast, —8.34 inches.

WIND.

The prevailing wind direction was from the west. The wind novement averaged 10 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 40 miles per hour from the west at Atlantic City on the 25th.

MISCELLANEOUS.

The per cent of possible sunshine was 71, or 8 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.05 inches, or 0.02 inch below normal. The highest reading was 30.47 inches at Long Branch and Trenton on the 13th, and the lowest 29.36 inches at Verona on the 17th.

The mean stage of the Delaware River at Phillipsburg was 0.2 foot, and the highest 0.8 foot on the 31st. The mean stage at Trenton was 0.1 foot below the zero of the gage, and the highest 0.1 foot on the 9th, 10th and 11th.

Thunderstorms occurred at several stations on the following dates: 6, 7, 8, 15, 16, 24, 25, 29 and 30. Dense fog was noted at various stations on the following dates: 1, 5, 24, 25 and 30. Light hail fell at Lakewood on the 8th. On the 30th hail was quite general throughout the State, it occurring in amounts varying from light to heavy. No damage was reported. Killing frost occurred in the northern section of the State as early as the 10th. In the central part it was mostly the 19th until it occurred. The southern portion and the sea coast has as yet been immune to a killing frost.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	54.2	82	29	4.20	5.85	2.91	.....	.....	.....	.....
1886	55.6	88	21	3.22	8.16	2.02	.....	.....	.....	.....
1887	52.3	89	21	2.61	5.00	1.58	.....	.....	.....	7
1888	49.2	73	25	4.73	7.00	2.97	.....	.....	.....	12
1889	50.8	82	23	3.80	5.03	2.42	.....	.....	10	11
1890	53.9	81	24	6.33	10.18	3.40	.....	.....	12	13
1891	52.8	92	18	3.44	5.57	1.88	9	8	14	8
1892	53.6	85	21	0.52	1.09	0.04	11	11	9	4
1893	55.2	85	17	4.22	6.59	1.74	14	12	5	7
1894	55.3	87	27	5.67	8.23	3.90	15	7	9	10
1895	49.9	83	18	3.60	5.53	1.62	12	7	12	5
1896	51.5	82	21	2.24	4.58	1.72	19	7	5	8
1897	55.8	**95**	22	2.43	6.49	0.87	11	8	12	7
1898	56.5	88	24	5.76	8.42	3.92	14	8	9	10
1899	56.6	86	18	2.72	4.65	1.07	13	9	9	6
1900	**59.9**	92	19	3.70	6.59	1.47	13	10	8	10
1901	54.4	82	21	1.93	4.45	0.87	10	8	13	4
1902	56.0	80	20	6.39	9.35	3.82	17	8	6	8
1903	55.9	86	24	**8.92**	**16.19**	4.17	15	7	9	8
1904	51.9	89	15	3.78	7.01	1.50	13	9	9	5
1905	55.5	90	17	2.71	4.83	0.75	20	6	5	7
1906	55.0	80	**11**	4.46	7.14	2.66	18	7	6	11
1907	50.6	80	18	4.46	7.18	2.70	8	9	14	7
1908	57.3	92	19	2.71	5.14	1.30	22	5	4	8
1909	51.2	84	18	1.16	1.82	0.40	15	5	11	8
1910	57.2	90	18	3.15	5.55	1.55	17	7	7	7
1911	53.9	80	18	5.49	8.23	2.61	15	8	8	12
1912	57.0	88	25	3.30	6.95	1.72	10	9	12	5
1913	57.8	83	25	7.79	13.84	2.70	17	8	6	11
1914	58.1	88	19	1.99	3.08	0.90	12	9	10	5
1915	56.2	84	23	3.08	5.18	1.89	13	9	9	9
1916	55.1	92	23	1.37	2.38	0.51	17	7	7	4
1917	50.7	84	22	6.99	9.74	4.28	18	8	5	10
1918	57.0	84	22	1.25	2.36	0.74	15	8	8	8
1919	59.0	92	25	3.43	[illegible]	2.01	16	9	6	13
1920	59.0	87	28	1.80	4.53	0.55	9	8	14	5
1921	54.1	82	16	0.97	2.18	0.33	20	5	6	5
1922	56.6	92	18	1.48	2.70	0.55	18	7	6	7
1923	53.9	81	21	4.25	6.37	2.35	19	6	6	8
1924	54.4	84	16	**0.31**	2.76	T.	16	8	7	1
1925	**49.1**	84	12	4.59	5.78	3.38	23	6	2	11
1926	53.1	90	17	4.08	6.03	1.79	9	9	13	11
1927	56.8	94	23	7.82	14.07	2.81	13	8	10	10
1928	56.1	90	16	1.19	2.58	0.24	18	5	8	6
1929	52.3	80	17	4.61	7.35	2.62	17	9	5	8
1930	52.6	89	12	1.95	3.70	0.93	15	8	8	6
1931	58.3	92	24	2.76	4.69	1.67	17	7	7	8
Normal	54.9	....	....	3.75	....	....	15	8	8	8
Extremes	....	95	11	....	16.19	T.	....	....	....	....

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Climatological Data for September, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	57.8	+4.0	87	5†	29	19	39	2.28	−1.39	0.80	0	7	19	2	10	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	56.0	+4.4	84	3†	30	10†	41	2.22	−2.25	0.66	0	9	18	2	11	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	......	......	33	31	....	1.67	−2.51	0.78	0	5	16	6	9	nw.	Brice E. Riker.
Dover	Morris	600	47	54.7	+3.4	83	6	32	19	38	3.37	−0.70	1.44	0	11	10	16	5	......	William C. Harris
Layton	Sussex	480	30	52.0	+0.5	83	5	24	13	47	2.14	−1.48	0.93	0	8	10	6	15	sw.	A. M. Depue.
Long Valley	Morris	520	1	......	......	83	5†	......	......	....	1.82	......	0.55	0	10	17	7	7	w.	S. N .Dilts.
Newton	Sussex	769	47	57.0	+4.3	85	6	31	13	38	2.44	−1.19	0.73	0	9	14	5	12	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	56.6	+2.7	85	5	33	31	35	2.62	−0.94	1.01	0	6	17	4	10	......	Town Engineer.
Sussex	Sussex	442	36	55.5	+2.3	82	3†	28	13	39	1.89	−1.55	0.82	0	6	20	4	7	n.	A. J. W. Mowatt
Meaus and extremes	......	......	....	55.7	+3.1	87	5†	24	13	47	2.27	−1.50	1.44	0	8	16	6	9	sw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	62.1	+5.9	83	5†	43	18	23	4.69	+0.02	1.40	0	5	16	13	2	w.	William Mann.
Boonton	Morris	400	§41	55.8	......	86	3	28	19	40	2.28	−1.63	0.89	......	8	22	2	7	nw.	John Kline.
Canoe Brook	Essex	173	1	56.7	......	92	8	26	19	44	2.72	......	0.88	......	7	21	4	6	w.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	......	......	......	......	....	3.19	−1.02	0.70	0	8	20	4	7	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	60.0ª	+4.6	90	6	34	13	39	2.67	−1.22	1.16	0	8	21	8	2	nw.	Union County Park Com.
Flemington	Hunterdon	140	§45	59.4	+3.4	90	6	31	19	42	2.70	−0.96	0.68	0	9	20	6	5	w.	Hiram E. Deats.
Jersey City	Hudson	10	33	60.6	+4.3	85	6	41	19	26	2.92	−1.76	1.12	0	10	16	8	7	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	44	59.9	......	87	6	33	13	36	1.84	−1.60	0.83	0	7	20	3	8	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	58.1	+3.2	88	6	31	13†	41	3.29	−1.22	1.02	0	8	16	7	8	nw.	Passaic Consolid. Water Co.
New Brunswick	Middlesex	110	78	58.4	+3.6	85	6	32	13†	35	2.54	−1.04	0.85	0	6	17	12	2	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	3.18	......	1.02	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	......	......	......	......	....	......	....	......	......	......	......	....	....	....	..	......	Vincent A. Messineo.
Plainfield	Union	120	43	58.4	+4.2	86	6	30	20	36	3.50	−0.65	1.00	0	8	14	11	6	w.	S. K .Pearson.
Ridgefield	Bergen	80	14	58.1	......	87	8	33	13	34	3.58	......	1.38	0	7	11	12	8	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	57.8	+3.5	89	6	30	13†	40	3.87	+0.43	1.75	0	7	18	4	9	w.	Julius Gerlich.
Verona	Essex	490	5	56.9	......	82	6†	34	13	30	2.65	......	1.17	0	9	14	9	8	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	2.67	......	0.69	......	8	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	61	60.4	+4.1	85	6	41	19	25	2.87	−0.66	1.07	0	11	11	12	8	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	58.6	+4.1	92	8	26	19	44	3.02	−0.97	1.75	0	8	18	7	6	w.	
The Southern Interior.																				
Belleplain	Cape May	30	37	......	......	86	6	......	......	....	2.23	−1.19	0.78	0	5	9	7	15	w.	A. F. Waldron.
Bridgeton	Cumberland	30	48	59.0	+1.6	85	4†	34	19	35	2.78	−0.81	1.53	0	7	22	5	4	sw.	Bennett K. Matlack
Burlington	Burlington	12	§45	60.6	+2.4	88	4	32	19	37	3.38	−0.27	1.50	0	7	19	6	6	sw.	Public Service Power Co.
Clayton	Gloucester	134	31	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	sw.	G. E. Lamb.
Freehold	Monmouth	194	¶26	58.6	......	85	6	32	13	35	2.38	−1.14	0.99	0	8	20	5	6	sw.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§25	59.0	......	88	6	31	19	38	4.07	+0.52	1.83	0	6	19	4	8	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	37	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. Elwood Crowshaw.
Indian Mills‡‡	Burlington	76	42	59.0	+3.5	88	5	29	19	43	3.63	+0.19	1.50	0	8	14	11	6	nw.	James M. Armstrong.
Lakewood	Ocean	54	27	56.8	+1.7	82	6†	31	19	32	4.03	+0.44	1.24	0	8	21	5	5	sw.	R. W. Holman.
Moorestown	Burlington	......	68	57.8	+3.1	85	5†	32	13†	35	2.56	−1.01	1.04	0	7	19	8	4	nw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	2.10	−0.68	0.80	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	58.5	......	84	6	33	19	34	3.46	......	1.19	0	5	18	6	7	w	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§33	58.4	......	86	6	29	19	37	2.69	−0.75	1.04	......	9	25	4	2	w.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	56.4	......	88	6	23	13	49	3.70	......	1.34	......	6	23	8	0	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	59.6	+4.0	86	6	37	19	28	2.22	−0.56	0.71	0	10	13	10	8	w.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	......	......	......	......	....	2.58	......	0.63	0	8	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	62.0	+5.9	86	4†	30	19	38	1.70	−1.83	0.95	0	4	22	0	9	nw.	John H. Brown.
Philadelphia, Pa	......	117	60	62.6	+4.8	85	6	45	19	24	2.61	−0.20	1.01	0	8	12	10	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	58.8	+3.2	88	4†	29	19	49	2.90	−0.59	1.83	0	7	19	6	6	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	60.5	+4.7	85	8	39	19	28	2.22	−1.49	1.04	0	8	26	3	2	nw.	Information Bureau.
Atlantic City	Atlantic	16	58	61.5	+4.6	80	6	40	19	26	2.11	−1.09	0.68	0	8	16	8	7	w.	U. S. Weather Bureau.
Cape May	Cape May	17	47	61.6	+2.0	82	3	40	19	25	1.94	−1.36	0.69	0	7	12	11	8	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	57.3	+1.0	78	8	34	13	30	3.34	−0.71	1.23	0	11	16	6	9	sw.	William D. Martin.
Sandy Hook	Monmouth	22	33	60.6	+3.6	82	6	44	19	22	2.41	−1.37	0.93	0	11	13	11	7	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	60.3	+3.2	85	8	84	13	30	2.40	−1.20	1.23	0	9	17	8	6	w.	
For the State	......	......	....	58.3	+3.4	92	8	24	13	49	2.76	−0.99	1.83	0	8	17	7	7	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used i determining section or division means. †† Received too late to be included in the means.

Reference letters, ª, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield i Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for October, 1931

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						T.	.20	.30	.20					T.	.06	.80													.60	.12		2.28
Charlotteburg	Passaic							.02	.45	.20					.08	.02	.66									.01			.60	.18			2.22
Culvers Lake	Delaware								T.			T.			T.	.10	.57										T.	T.	T	.78	.14	.08	1.67
Dover	Passaic							.01	.96						.06	*	.75	.09							T.	.01			*	.64	.80	.05	3.37
Layton	Delaware							.02	.20	.03					.26	.04	.49	T.												.93	.17		2.14
Long Valley	Morris						.01	.04	.45	.06					.01	.02	.55	.05												.55	.08		1.82
Newton	Delaware							.17	.45	.04					.08	.06	.60									T.			T.	.73	.20	.11	2.44
Phillipsburg	...do						.25	.03	1.01						T.	.63	T.	T.							T				T	.68	.02		2.62
Sussex	Hudson					.02			.23							.14	.42													.82	.26		1.89
The Red Sandstone Plain.																																	
Bayonne	Coast								1.12							1.40									.25				1.02		.90		4.69
Boonton ‖	Passaic									.89						.03	.42	.02								.02				.42	.26	.22	2.28
Canoe Brook ‖	Essex									.45						.08	.70									.08				.88	.03	.50	2.72
Chatham ‖	...do								T.	.50						.17	.67	.14								.12				.70	.48	.41	3.19
Elizabeth	Coast								.15	.45						.03	1.16	.05								.03			T.	.60	.20		2.67
Flemington	Raritan						T.	.02	.64	.55					T.	.06	.48	.02								.03			T.	.68	.22		2.70
Jersey City	Coast								.35	.41		T.	T.		.01	.02	1.12	.02							.02	.01			T.	.65	.31		2.92
Lambertville	Delaware							.02	.63	.07					T.	.02	.23									.04			T.	.83	T.	T	1.84
Little Falls ‖	Passaic									.66						.06	1.02	.03								.05			T.	.85	.05	.57	3.29
New Brunswick	Raritan								.17	.45						T.	.85	.03							T.	T.				.52	.52	T.	2.54
New Milford ‖	Hackensack									.78						.08	1.02	.12								.07				.38	.35	.38	3.18
Paterson	Passaic																																
Plainfield	Raritan						.02	T.	.88	.17		T.					.02	1.00								.13				.88	.40		3.50
Ridgefield**	Hackensack							T.	.38	.34						.43	1.38									.10		T.		.67	.28		3.58
Somerville	Raritan						.09	T.	1.75	.13						.63										.06				.98	.23		3.87
Verona**	Passaic							T.	.54						.05	.53	.24	.03							05			T.	.04	.73	.44		2.65
Woodcliff Lake ‖	Hackensack									.41						.10	.69	.05								.11				.41	.39	.47	2.67
New York, N. Y***	Coast								.73	.02		T	T.		.01	.76	.33	.02							.02	.01		T.	.02	.66	.29		2.87
The Southern Interior.																																	
Belleplain	Tuckahoe							T.		.20						.26	.63													.78	.36		2.23
Bridgeton	Coast							.07	.06	.26						.06	.77									.03				1.53			2.78
Burlington	Delaware							.08	1.50	.33							.75	.03												.68	.01		3.38
Clayton	...do																																
Freehold	Raritan							.12	.09	.45			T.				.63	.03							T.	.02				.99	.05		2.38
Hammonton	Mullica							T.	.02	.80						.06	1.09									T				1.83	.27		4.07
ightstown	Raritan																																
ndian Mills	Mullica							.06	.05	1.05						.02	.88	.03								T.				1.50	.04		3.63
akewood	Metedeconk							.05	.95	.55						.04	1.20									.04			T.	1.15	.05		4.03
Moorestown ‖	Delaware								.03	1.04	T.					.03	.60	.07								T.				.76	.03		2.56
Northfield	Coast							T.	.05	.53						.19	.40	.01								.08				.80	.04		2.10
Pemberton								.01	.17	1.19						T.	1.15												T.	.94			3.46
Pleasantville ‖	Coast								.13	.91						.21	.27									.03	.14			.50	.45	.05	2.69
Runyon	Coast								.60	.46							1.31	.03												.96	.34		3.70
Trenton***	Delaware							.01	.42	.06					T.	.38	.24	.02							T.	.01		T.	.04	.67	.37		2.22
Trenton No. 2‖	...do								.02	.39						.02	.54	.08								T.			T.	.63	.27	.63	2.58
Tuckerton	Coast									.61							.12													.95	.02		1.70
Phila., Pa***	Delaware							.05	.98	.03					T.	.66	.14	.02							T.	T.			.01	.72	T.		2.61
The Sea Coast.																																	
sbury Park	Coast							.01	.35							.20	.49	.01								T.			.04	.98	.14		2.22
tlantic City***	...do							T.	.44	.24			T.			.22	.13	T.							T.	.04			.01	.59	.44		2.11
ape May	...do							.01	T	.69						.17	.32									.07				.63	.05		1.94
ong Branch**	...do							.09	.70						.01	.80	.30	.03							.09	.03			.30	.93	.06		3.34
andy Hook***	...do							.02	.91	.02					T.	.44	.23	.01							.03	.01			.05	.56	.13		2.41

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind	Highest			Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly-velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.06	30.45	13	29.44	17	12.8	40	w.	25	78	60	72	72
ong Branch	30.04	30.47	13	29.43	17					75	66	70	
oorestown										82	51	73	
ew York, N. Y	30.04	30.46	13	29.38	17	12.7	50	nw.	26	77	56	63	72
hiladelphia, Pa	30.08	30.48	13	29.43	17	10.5	34	n.	12	74	49	60	74
idgefield	30.04	30.46	13	29.39	17								
andy Hook	30.04	30.46	13	29.38	17	11.9	38	n.	25	79	60	73	71
renton	30.06	30.47	13	29.40	17	7.8	31	nw.	26	80	49	65	71
erona		30.47	13	29.36	17	5.5	31	nw.	25	73	45	69	

Daily Temperatures for October, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	76	81	85	85	87	87	74	82	66	72	75	65	68	64	79	68	57	56	68	71	70	71	72	70	72	62	68	69	63	58	55	70.8
	Minimum	46	44	46	53	54	53	56	61	46	38	39	42	31	44	54	57	45	46	29	32	42	43	41	38	51	47	45	43	53	40	32	44.9
Charlotteburg	Maximum	72	76	84	80	84	83	78	82	64	68	71	70	70	65	74	70	57	51	64	72	68	69	72	68	71	65	66	73	68	60	52	69.9
	Minimum	45	43	51	44	49	49	48	60	45	30	34	38	30	34	54	53	44	37	34	31	42	40	34	34	51	45	42	44	52	34	30	42.0
Dover	Maximum	71	75	80	77	82	85	69	80	65	66	70	61	64	61	72	60	53	51	64	68	68	68	68	67	72	61	66	72	58	59	53	67.2
	Minimum	46	48	47	50	52	52	53	54	41	35	36	39	33	40	34	52	43	35	32	33	43	42	37	37	50	46	41	43	44	36	33	42.2
Layton	Maximum	73	77	81	75	88	81	72	78	64	67	70	64	71	59	76	62	54	51	65	63	68	53	69	60	60	52	64	55	55	47	50	65.1
	Minimum	42	44	43	47	51	51	50	49	42	34	35	38	24	30	53	52	41	30	25	29	32	25	29	29	45	45	35	41	47	40	30	39.0
Long Valley	Maximum	73	76	78	82	83	83	73	80	66	67	72	69	66	64	73	69	59	59	60	70	69	67	67	66	72	64	65	71	62	52	54	68.7
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Newton	Maximum	75	79	83	83	84	85	74	83	64	65	73	68	68	64	74	67	68	64	67	73	70	68	68	73	73	60	71	73	59	53	57	70.5
	Minimum	48	46	47	53	53	54	51	53	41	35	38	35	31	43	53	51	43	34	32	35	45	41	37	49	50	45	38	43	48	39	33	43.4
Phillipsburg	Maximum	75	79	81	81	85	84	75	81	64	66	74	62	66	63	74	61	55	55	65	69	70	52	66	68	73	62	65	70	63	58	55	68.3
	Minimum	47	45	48	53	54	54	57	56	46	46	40	43	34	47	56	55	48	36	34	34	40	36	39	38	48	48	44	43	48	41	33	44.9
Sussex	Maximum	73	75	82	80	82	79	74	79	75	67	70	68	67	64	74	70	57	50	64	69	65	66	67	70	70	59	64	70	69	56	51	68.6
	Minimum	46	44	45	48	54	52	53	45	49	38	36	40	28	36	54	53	44	40	29	31	38	34	33	36	52	47	38	45	53	41	31	42.4
The Red Sandstone Plain.																																	
Bayonne	Maximum	78	76	79	80	83	82	76	83	66	70	72	59	65	68	75	73	60	54	60	69	70	66	68	70	72	63	66	72	63	60	55	69.5
	Minimum	61	60	61	62	63	61	64	60	52	53	54	45	46	56	62	58	56	43	45	47	55	50	52	56	57	51	51	54	57	57	48	54.7
Boonton§§	Maximum	74	77	86	79	82	85	75	83	70	69	74	59	65	65	73	65	56	54	67	71	72	70	71	69	79	61	69	73	62	59	56	70.0
	Minimum	41	45	46	49	52	50	53	59	46	34	34	40	29	38	49	55	48	41	28	31	36	35	34	36	39	48	39	41	46	33	37	41.7
Canoe Brook§§	Maximum	74	78	83	78	85	85	77	92	73	73	78	64	71	68	82	67	58	57	69	71	70	69	70	70	73	65	68	74	62	60	56	71.6
	Minimum	41	40	42	47	55	50	52	60	47	37	34	43	27	37	55	56	46	38	26	39	35	30	30	36	48	48	37	39	52	40	29	41.8
Elizabeth	Maximum	79	81	87	80	88	90	81	88	69	70	....	77	70	66	78	68	59	55	68	74	72	68	72	67	76	65	71	74	64	62	63	72.7
	Minimum	45	50	49	54	58	51	62	65	50	40	....	41	34	45	57	58	47	40	44	37	44	38	39	43	52	48	39	43	55	42	52	47.4
Flemington	Maximum	76	85	85	81	89	90	80	82	67	74	75	68	71	65	75	69	62	57	70	76	70	75	75	76	76	66	73	72	70	63	60	73.3
	Minimum	44	51	51	52	54	55	59	62	49	40	39	43	33	45	55	57	47	40	31	34	45	39	39	40	51	47	42	39	53	39	34	45.5
Jersey City	Maximum	75	77	82	78	84	85	73	84	64	67	72	61	65	66	75	69	58	54	65	67	70	66	67	67	72	62	69	72	65	61	57	69.3
	Minimum	53	58	59	64	62	64	63	58	51	50	53	44	43	53	60	54	50	42	41	46	51	48	49	51	52	51	47	50	56	46	43	52.0
Lambertville	Maximum	76	77	84	84	85	87	80	83	66	69	74	65	69	65	77	67	55	53	66	71	66	71	75	72	72	62	67	73	64	63	56	70.8
	Minimum	50	52	56	54	60	61	59	57	46	42	46	41	33	49	58	55	46	37	35	43	41	41	40	41	55	45	42	46	51	40	38	47.1
Little Falls§§	Maximum	75	80	87	81	86	88	77	86	66	72	74	69	70	65	78	65	58	57	69	74	73	71	74	72	75	70	71	77	61	59	56	72.1
	Minimum	45	45	46	50	55	54	56	62	46	37	36	42	31	42	56	56	47	40	31	34	43	35	36	30	46	50	38	44	53	40	33	44.1
New Brunswick	Maximum	76	79	82	78	84	85	79	82	67	67	72	68	66	66	75	69	58	53	64	71	69	67	69	71	73	67	66	71	66	61	57	70.3
	Minimum	47	53	52	54	54	56	60	65	48	41	40	43	32	48	57	58	49	40	32	36	42	42	38	42	53	43	42	44	55	41	35	46.5
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Plainfield	Maximum	77	78	83	80	85	86	74	85	65	67	74	63	66	67	75	76	59	54	65	66	70	67	68	72	74	63	70	79	66	62	58	70.8
	Minimum	46	48	48	51	58	55	59	62	47	40	39	41	33	46	50	53	57	47	41	30	35	44	36	41	51	47	39	45	56	38	40	45.9
Ridgefield	Maximum	76	80	82	78	85	86	74	87	64	68	73	62	65	65	76	64	55	57	65	73	73	67	70	68	72	61	70	73	62	63	55	70.0
	Minimum	51	51	51	51	56	57	60	54	46	41	42	40	33	49	57	57	42	36	35	39	45	39	39	44	52	49	43	49	46	42	37	46.2
Somerville	Maximum	77	80	85	81	87	89	77	86	65	69	75	67	70	66	78	65	57	58	67	73	72	69	73	72	75	64	70	73	64	60	60	71.7
	Minimum	42	47	50	50	55	54	56	59	50	38	37	40	30	43	56	54	47	40	30	33	44	37	37	39	49	43	40	39	53	40	32	44.0
Verona	Maximum	73	75	78	77	80	82	71	82	61	64	70	57	64	63	75	62	54	51	62	68	68	65	66	67	71	58	66	72	59	60	55	67.0
	Minimum	51	52	54	55	54	60	60	54	44	39	46	41	34	49	57	52	42	38	37	43	48	43	40	45	50	48	41	48	48	41	36	46.8
New York, N. Y.	Maximum	73	75	81	76	82	85	72	82	64	66	70	59	64	66	74	66	57	53	64	68	69	65	67	66	71	61	68	71	64	61	56	68.3
	Minimum	54	59	60	65	62	65	64	57	51	50	53	44	43	54	60	56	46	42	41	46	54	58	51	52	53	51	47	51	56	48	43	52.5
The Southern Interior.																																	
Belleplain	Maximum	75	77	83	85	83	86	84	82	73	68	73	....	68	72	72	69	59	56	65	70	73	68	72	73	76	67	67	73	65	67	59	72.0
	Minimum	63	61	59	59	59	58	59	59	63	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Bridgeton	Maximum	77	84	83	85	81	83	84	85	68	64	74	65	71	72	74	67	58	55	62	60	74	63	71	68	72	65	61	68	62	62	57	70.2
	Minimum	48	51	54	60	55	57	61	68	51	45	43	45	36	46	60	58	48	39	34	36	42	37	41	41	53	45	41	45	55	45	38	47.7
Burlington	Maximum	78	79	84	88	86	83	86	83	69	71	73	65	68	68	74	73	61	55	66	72	72	70	72	74	75	69	68	73	67	69	60	72.6
	Minimum	47	48	49	53	60	65	56	66	50	51	52	41	37	45	59	59	51	45	32	35	42	49	38	42	57	48	47	43	57	42	37	48.5
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Freehold	Maximum	76	82	81	79	84	85	82	83	66	66	72	66	67	67	76	67	56	53	64	70	69	65	68	72	73	60	66	74	64	67	58	70.5
	Minimum	48	43	52	56	54	59	64	65	48	49	43	42	32	47	59	56	47	39	34	38	46	37	37	42	53	44	39	47	55	40	39	46.8
Hammonton	Maximum	77	79	84	87	87	88	84	84	70	68	74	66	70	71	75	70	60	57	66	73	74	69	73	75	75	64	69	74	67	69	61	72.9
	Minimum	45	47	51	54	55	55	68	68	48	41	42	42	32	42	58	53	44	36	31	35	41	35	36	41	51	39	36	42	57	41	36	45.2
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Indian Mills	Maximum	78	80	87	87	87	88	86	84	72	67	75	68	72	70	76	68	59	54	75	74	76	67	70	75	75	68	68	75	68	68	61	73.1
	Minimum	44	47	48	54	57	54	57	66	50	41	39	43	30	40	59	59	47	37	29	31	37	35	36	41	50	39	38	55	58	40	35	45.0
Lakewood	Maximum	74	75	79	77	80	82	70	82	66	64	70	66	61	69	74	66	55	53	62	67	69	64	65	68	73	65	64	73	65	65	57	68.7
	Minimum	42	40	50	52	50	57	60	60	50	41	39	43	32	43	59	55	47	37	31	37	41	34	34	50	54	41	39	43	57	39	36	44.9
Moorestown	Maximum	76	79	83	84	85	85	80	84	62	67	72	58	67	65	71	63	54	53	64	70	71	67	71	72	74	63	67	71	63	67	58	69.9
	Minimum	48	50	52	56	56	59	62	56	44	42	43	40	32	45	59	53	46	34	32	38	44	40	38	41	49	45	46	43	46	40	39	45.7
Pemberton	Maximum	75	77	80	82	83	84	82	82	66	67	72	66	65	69	74	67	59	54	63	68	71	65	67	72	74	66	65	72	64	68	58	70.2
	Minimum	45	49	49	57	54	56	61	66	50	45	41	43	34	45	60	58	49	42	33	34	43	39	38	43	54	44	38	46	57	41	38	46.8
Pleasantville§§	Maximum	76	78	83	81	83	87	81	83	63	66	73	60	64	71	72	70	61	56	65	72	73	68	68	68	76	63	69	71	66	65	61	70.8
	Minimum	43	50	53	55	52	57	56	69	52	44	39	45	35	45	62	60	49	38	29	35	42	35	35	37	52	40	36	45	60	41	35	46.0
Runyon	Maximum	78	80	84	86	85	88	85	84	67	76	74	74	72	70	78	68	60	59	68	77	76	70	72	75	70	68	75	74	74	72	73	74.6
	Minimum	38	40	40	44	42	49	50	50	48	32	31	38	23	38	45	55	49	39	25	36	34	24	28	36	35	34	34	36	38	40	36	38.1
Trenton	Maximum	75	76	82	82	84	86	79	82	62	67	71	60	67	67	74	64	55	53	64	70	70	72	72	72	73	61	66	71	64	64	58	69.8
	Minimum	51	54	57	58	58	61	61	55	40	46	48	44	46	51	60	55	47	41	37	43	49	46	44	46	51	48	44	48	53	43	42	49.4
Tuckerton	Maximum	75	75	85	86	85	86	83	82	75	75	76	75	68	72	70	72	72	71	68	65	72	72	70	70	72	70	72	76	72	72	65	74.2
	Minimum	67	57	55	55	67	65	65	67	55	45	44	43	38	45	60	58	52	36	30	35	38	36	37	45	50	50	55	58	55	45	36	49.8
Philadelphia, Pa.	Maximum	76	79	84	84	84	85	81	83	65	69	73	65	66	68	73	66	57	55	67	72	72	70	71	72	75	63	66	69	66	66	59	71.0
	Minimum	55	60	63	65	62	68	66	59	53	51	52	48	46	55	63	56	50	45	45	48	53	49	51	51	57	52	50	53	57	50	48	54.2
The Sea Coast.																																	
Asbury Park	Maximum	77	77	76	77	77	83	74	85	62	65	74	68	62	69	69	67	57	55	64	71	71	65	62	64	74	62	66	74	65	65	59	68.9
	Minimum	53	54	57	60	60	62	67	62	58	49	50	46	41	53	62	56	50	41	39	43	50	49	42	52	57	51	42	52	57	48	42	52.1
Atlantic City	Maximum	74	77	77	76	74	80	76	78	61	64	71	66	65	69	69	69	60	56	66	69	75	65	66	66	75	64	67	69	64	65	59	68.8
	Minimum	62	56	61	67	67	66	67	61	55	52	55	48	43	61	65	59	49	42	40	48	52	46	45	56	54	47	44	60	57	48	46	54.2
Cape May	Maximum	75	76	82	77	76	81	76	79	65	67	73	68	65	73	72	68	62	55	61	68	71	65	66	68	75	63	64	72	64	66	58	69.3
	Minimum	62	58	62	65	66	64	66	61	52	48	51	47	40	60	65	59	50	45	40	47	53	45	44	56	58	53	49	60	56	49	44	54.0
Long Branch	Maximum	73	76	73	71	76	76	71	78	60	63	71	66	63	69	70	71	56	58	63	70	68	63	60	62	72	62	66	73	63	62	57	67.2
	Minimum	50	49	53	54	54	58	63	56	50	49	50	45	34	51	60	50	40	39	36	40	46	49	44	42	46	44	42	51	49	43	41	47.4
Sandy Hook	Maximum	75	75	79	74	79	82	72	81	62	64	71	63	62	67	74	65	58	53	62	68	67	64	62	64	68	60	64	71	63	63	56	67.4
	Minimum	57	57	60	63	63	64	64	59	54	55	54	48	49	55	61	58	48	45	44	48	53	51	53	51	55	52	49	53	54	50	45	53.9

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.128	.160	.144	.080	.128	.144	.098	.110	.064	.096	.160	.160	.064	.082	.526	.048	.256	.064	.128	.128	.160	.096	.064	.094	.108	.144	.160	.116	.066	.050	.048	3.87
	Wind movement	40	50	30	30	11	33	15	58	88	49	30	110	46	33	36	22	51	99	48	31	37	43	35	32	41	74	91	66	65	27	29	145
Runyon	Evaporation	.080	.080	.100	.120	.100	.120	.120	.050	.060	.120	.120	.120	.120	.120	.120	.010	.090	.120	.120	.100	.100	.090	.080	.080	.080	.080	.105	.105	.055	.040	.080	2.88
	Wind movement	22	24	18	12	6	15	14	24	16	14	20	25	18	22	30	21	28	43	12	20	22	6	19	20	22	26	15	23	17	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. **Observations taken in the morning, and entered on preceding day.

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CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVI. November, 1931. No. 11

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to he Superintendent of Documents, Government Printing Office, Washington, D. C. It s furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

November was quite an exceptional month being the warmest n record (46 years) and the second driest. The average temperature, 50.4 degrees, exceeded the previously highest month, n 1902, by 1.1 degree. The highest temperatures were in the eventies and occurred mostly on the 10th in the more northrn portion and on the 21st, 22d and 23d in the southern. The owest were below the freezing point in nearly all cases, and were egistered on the 7th and 8th with a few exceptions. The temperatures experienced during the month were about what would ormally occur during the latter half of October.

The precipitation, which was mostly rain, averaged only oneourth of the normal amount. The average for the State, 0.82 nch, is the second lowest on record, or since 1885, the driest Jovember being that of 1917 with 0.56 inch. The southern alf of the State received practically no rain during the first half f the month, and only comparatively little during the second alf. Over the northern portion some light rains occurred on he 1st and 2d, 19th-20th, and during the last four days of the nonth. The first general snow of the season came on the 27th nd the amount of the fall ranged from one to three inches, xcept along the coast where it was of inappreciable amount.

There were no damaging storms reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 38 stations, was 50.4°, which was 7.4° above ormal. The highest temperature was 80° at Boonton on the 8th, and the lowest, 14°, at Layton on the 7th. The greatest aily range of temperature was 44° at Flemington and Runyon n the 10th. The highest monthly mean temperature was 54.5° Tuckerton, and the lowest, 43.6° at Layton.

The temperature departure from the normal for the year, 1931, date, by sections, is: The Highlands, +2.6°; Red Sandstone lain, +2.8°; Southern Interior, +2.3°; Sea Coast, +2.7°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from obrvations of 44 stations, was 0.82 inch, which was 2.38 inches elow normal. The average total snowfall at 20 selected staons was 1.6 inches. The greatest monthly precipitation was 19 inches, at Charlotteburg and Sussex, and the least, 0.42 ch at Northfield. The greatest amount of precipitation in any 4 consecutive hours was 0.61 inch at Layton on the 30th. The ean of the number of days on which 0.01 inch or more of prepitation fell was 6, or 2 less than normal.

The precipitation accumulated departure from the normal for e year, 1931, to date, by sections, is: The Highlands, —4.60 ches; Red Sandstone Plain, —6.79 inches; Southern Interior, 6.97 inches; Sea Coast, —10.84 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 3 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 37 miles per hour from the north at Sandy Hook on the 6th.

MISCELLANEOUS.

The per cent of possible sunshine was 59, or 1 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.20 inches, or 0.10 inch above normal. The highest reading was 30.61 inches at Long Branch on the 27th, and the lowest 29.64 inches on the 30th at Sandy Hook.

The mean stage of the Delaware River at Phillipsburg was 0.5 foot, and the highest 1.0 feet on the 21st. The mean stage at Trenton was 0.0, 1.8 feet below the normal. The highest was 0.4 foot on the 20th.

Dense fog was noted at various stations on the following dates: 10, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 28, 29 and 30. Thunderstorms occurred at Newton on the 1st and 20th. A light fall of sleet occurred on the 27th at Atlantic City and on the 28th at Dover. Hail was noted at Verona on the 1st; it was light. Killing frost has been reported by all stations in the State with the exception of Sandy Hook and Bayonne.

OCMPARATIVE DATA FOR NOVEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	44.8	76	18	4.53	7.90	2.72	......	......	......	......	......
1886	44.5	73	17	4.49	6.24	3.45	......	......	......	......	......
1887	41.5	72	13	1.94	2.60	0.95	......	......	......	......	6
1888	45.8	77	8	3.97	5.41	2.66	......	......	......	13	10
1889	45.7	69	13	**8.48**	**11.45**	4.70	......	......	......	13	13
1890	43.8	74	11	0.82	1.10	0.38	......	13	12	5	8
1891	42.2	70	6	2.39	3.47	1.54	......	12	10	8	4
1892	41.9	71	12	7.29	9.49	4.74	......	8	9	13	11
1893	41.8	70	11	3.48	4.53	2.19	......	10	11	9	7
1894	40.3	76	11	3.34	5.12	1.77		13	7	10	10
1895	45.7	80	12	3.17	5.10	1.56	0	12	7	11	10
1896	48.2	78	12	3.05	5.68	1.37	3.2	9	9	12	8
1897	43.8	74	10	4.59	5.95	2.42	1.3	8	11	11	12
1898	42.4	70	11	6.76	9.07	3.83	**14.7**	10	9	11	14
1899	44.0	71	17	2.29	4.32	0.72	1.1	15	8	7	7
1900	47.5	79	15	3.43	5.54	1.82	T.	9	10	11	9
1901	**38.5**	69	10	2.38	4.23	1.18	0.8	12	9	9	6
1902	49.3	80	20	2.20	4.17	0.87	0.2	10	11	9	8
1903	39.9	79	3	1.26	2.03	0.75	T.	16	8	6	6
1904	40.2	69	6	2.18	3.40	1.30	1.6	12	10	8	6
1905	42.1	70	6	1.84	2.86	0.54	0.1	12	10	8	6
1906	43.6	70	8	1.61	2.52	1.06	2.3	16	7	7	6
1907	43.5	68	13	5.65	6.95	4.19	0.8	10	8	12	13
1908	43.1	72	2	0.96	1.29	0.35	2.2	14	8	8	4
1909	46.4	80	12	2.36	4.33	1.32	2.1	13	8	9	8
1910	40.4	71	13	3.79	5.73	1.63	1.4	5	13	12	9
1911	41.3	73	13	5.17	6.50	3.17	1.7	8	11	11	10
1912	45.3	76	11	3.43	8.12	2.02	1.3	15	8	7	6
1913	46.2	77	21	2.71	4.89	1.00	T.	14	7	9	7
1914	43.3	80	6	2.60	4.81	1.21	0.7	16	8	6	6
1915	44.0	75	17	1.69	3.11	0.96	0	14	8	8	8
1916	43.3	75	12	2.11	3.81	0.80	T.	16	5	9	8
1917	39.8	68	9	**0.56**	1.15	**0.18**	0.7	19	5	6	3
1918	43.9	71	12	1.87	3.05	0.49	0	14	6	10	7
1919	43.7	76	13	3.74	6.18	1.98	T.	13	7	10	11
1920	43.0	74	12	4.41	7.90	2.14	0.2	9	6	15	10
1921	44.3	79	18	4.26	6.69	2.79	0.1	9	6	15	14
1922	44.3	73	13	0.91	1.56	0.49	0.2	13	8	9	6
1923	43.1	72	11	2.51	4.09	1.10	0	11	8	11	7
1924	42.9	77	**1**	2.03	3.23	1.17	1.3	14	8	8	5
1925	42.0	76	10	3.40	5.10	2.48	0.7	14	8	8	9
1926	42.5	76	8	4.04	7.19	2.44	T.	13	8	9	9
1927	47.9	78	15	4.02	8.68	1.74	0.1	10	8	12	11
1928	45.1	78	13	1.90	2.76	1.20	0.3	10	9	11	9
1929	44.5	**83**	4	2.73	3.64	2.08	0.4	10	7	13	10
1930	44.1	73	2	3.70	6.54	1.41	0.2	12	6	12	9
1931	**50.3**	80	14	0.82	1.19	0.42	1.6	12	7	11	6
Normal	42.9	......	......	3.20	......	......	1.1	12	8	10	8
Extremes	......	83	1	......	11.45	0.18	......	......	......	......	......

W. B. O. Philadelphia 11-23-31 830.

Climatological Data for November, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	.....	.....	.....	.....	.....	.....	....	0.93	−2.31	0.42	3.5	4	16	3	11	.....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	48.0	+7.9	75	10	17	8	40	1.19	−2.33	0.40	3.0	11	10	6	14	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	.....	.....	.....	.....	20	7	....	0.84	−1.96	0.42	4.0	7	10	9	11	s.	Brice E. Riker.
Dover	Morris	600	47	48.8	+8.7	79	10	19	7	38	0.91	−2.73	0.38	3.0	11	5	14	11	.....	William C. Harris
Layton	Sussex	480	30	43.6	+4.8	76	10	14	7	50	1.06	−1.43	0.61	3.0	7	9	5	16	s.	A. M. Depue.
Long Valley	Morris	520	1	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	.....	S. N .Dilts.
Newton	Sussex	769	47	48.2	+7.7	77	10	20	7	39	1.12	−2.01	0.41	4.0	7	6	8	16	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	48.8	+7.6	73	21	26	7	36	0.78	−2.42	0.33	2.8	5	15	3	12	.....	Town Engineer.
Sussex	Sussex	442	36	46.8^{a}	+5.7	71	10†	18	7	38	1.19	−2.06	0.42	5.2	6	13	8	9	n.	A. J. W. Mowatt
Means and extremes	.....	.....	....	47.4	+7.1	79	10	14	7	40	1.00	−2.16	0.61	3.6	7	11	7	12	s.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	53.7	+10.0	74	21†	33	27	23	0.94	−2.33	0.40	2.0	5	19	7	4	sw.	William Mann.
Boonton	Morris	400	§41	49.0	.....	80	13	18	7	43	0.66	−2.91	0.20	.....	10	12	2	16	sw.	John Kline.
Canoe Brook	Essex	173	1	48.3	.....	75	10†	16	7	43	0.53	.....	0.20	.....	7	12	8	10	sw.	N. J. Water Policy Comm.
Chatham	Morris	185	27	.....	.....	.....	.....	.....	.....	....	0.45	−2.45	0.21	2.1	7	11	6	13	.....	Paul Molitor, Sr.
Elizabeth	Union	45	52	51.3	+7.8	78	21	23	7	35	0.66	−2.59	0.29	1.4	7	17	4	9	sw.	Union County Park Com.
Flemington	Hunterdon	140	§45	50.6	+7.7	77	10	24	7†	44	0.78	−2.34	0.34	3.0	8	13	8	9	sw.	Hiram E. Deats.
Jersey City	Hudson	10	33	51.7	+7.7	74	21	30	7	25	0.67	−2.52	0.28	1.5	5	11	8	11	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	44	50.2	.....	75	22†	24	7	31	1.04	−2.17	0.39	3.5	6	17	3	10	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	50.4	+8.2	79	10	22	8	42	0.76	−2.14	0.33	2.5	6	14	6	10	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	78	50.4	+7.0	74	21	24	7	30	0.72	−2.76	0.27	2.7	6	12	9	9	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	.....	13	.....	.....	.....	.....	.....	.....	....	0.66	.....	0.22	.....	6	....	....	....	.....	Hackensack Water Co
Paterson	Passaic	80	60	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	.....	Vincent A. Messineo.
Plainfield	Union	120	43	49.8	+7.3	76	21	20	7	34	0.82	−2.55	0.40	2.5	6	4	14	12	sw.	S. K .Pearson.
Ridgefield	Bergen	80	14	49.8	.....	75	23	25	8	30	0.66	.....	0.36	2.1	6	7	9	14	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	49.8	+7.4	76	22	21	7	40	0.86	−2.18	0.33	1.2	7	11	7	12	w.	Julius Gerlich.
Verona	Essex	490	5	48.7	.....	73	10	24	7	27	1.02	.....	0.34	2.5	8	11	6	13	sw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	.....	.....	.....	.....	.....	.....	....	0.94	.....	0.47	.....	6	....	....	....	.....	Hackensack Water Co.
New York, N. Y.	.....	365	61	51.5	+7.3	72	23	30	7	23	0.61	−2.35	0.24	1.2	5	8	9	13	nw.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	50.3	+7.9	80	13	16	7	44	0.76	−2.45	0.47	2.2	7	12	7	11	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	37	52.0^{g}	+7.5	76	21†	25^{g}	8	40^{g}	0.82	−1.79	0.35	T.	7	5	7	18	sw.	A. F. Waldron.
Bridgeton	Cumberland	30	48	51.4	+5.8	77	22	26	7	35	0.82	−1.98	0.32	T.	5	11	9	10	s.	Bennett K. Matlack
Burlington	Burlington	12	§45	52.5	+8.1	77	21	28	7	37	1.02	−2.09	0.37	1.3	5	13	4	13	sw.	Public Service Power Co.
Clayton	Gloucester	134	31	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	....	....	....	....	.....	G. E. Lamb.
Freehold	Monmouth	194	¶26	50.8	.....	75	21	24	7	34	1.17	−2.85	0.44	1.5	7	13	7	10	sw.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§25	51.0	.....	78	21†	21	7	35	0.69	−2.63	0.32	0.5	7	16	7	7	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	37	51.1	+7.2	77	21†	21	6	31	.....	.....	.....	.....	....	....	....	....	.....	S. Elwood Crowshaw.
Indian Mills‡‡	Burlington	76	42	51.5	+8.6	78	22	20	7	41	1.18	−1.90	0.49	2.0	5	11	10	9	sw.	James M. Armstrong.
Lakewood	Ocean	54	27	50.1	+7.3	73	21†	24	7	30	0.77	−1.69	0.30	1.0	7	14	6	10	w.	R. W. Holman.
Moorestown	Burlington	.....	68	50.0	+6.8	74	22	27	7	31	1.03	−2.22	0.39	2.8	7	14	3	13	sw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	24	.....	.....	.....	.....	.....	.....	....	0.42	−1.96	0.24	0	5	....	....	....	.....	William L. Flick.
Pemberton	Burlington	55	....	51.4	.....	76	21	26	7	35	0.76	.....	0.32	2.2	4	12	5	13	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§33	50.6	.....	76	22	21	7	35	0.54	−2.18	0.17	.....	7	17	1	12	s	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	47.4	.....	76	22	16	8	44	1.04	.....	0.53	.....	4	20	6	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	51.1	+6.7	75	21	28	7	27	0.94	−1.79	0.36	1.6	9	9	10	11	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	.....	.....	.....	.....	.....	.....	....	0.78	.....	0.35	2.8	8	....	....	....	.....	Edward H. Ristow.
Tuckerton	Ocean	23	38	54.5	+10.4	75	23	28	26	37	0.59	−2.49	0.45	T.	4	10	7	13	nw.	John H. Brown.
Philadelphia, Pa	.....	117	60	54.0	+8.3	74	21	34	27	23	1.00	−1.70	0.40	1.2	7	8	11	11	sw.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	51.1	+7.6	78	21†	16	8	44	0.84	−2.13	0.53	1.3	6	13	6	11	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	51.7	+6.9	73	10†	27	7	28	0.88	−2.04	0.40	T.	4	18	8	4	nw.	Information Bureau.
Atlantic City	Atlantic	16	58	52.9	+7.3	72	22	29	7	29	0.61	−2.21	0.21	T.	7	11	8	11	w.	U. S. Weather Bureau.
Cape May	Cape May	17	47	53.2	+5.8	74	22	32	7	25	0.53	−2.69	0.40	T.	4	7	12	11	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	50.8	+6.6	75	23	24	7	27	0.45	−3.07	0.18	T.	6	11	7	12	sw.	William D. Martin.
Sandy Hook	Monmouth	22	33	51.4	+6.8	71	23	33	7	18	0.77	−2.48	0.28	T.	7	8	6	16	sw.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	52.0	+6.7	75	23	24	7	29	0.65	−2.50	0.44	T.	6	11	8	11	sw	
For the State	.....	.....	....	50.4	+7.4	80	13	14	7	44	0.82	−2.38	0.61	1.6	6	12	7	11	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for November, 1931

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.05	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.11	T.	T.	....	T.	....	....	....	....	....	....	.35	....	....	.42	....	0.93
Charlotteburg	Passaic	.09	....	....	....	....	....	....	....	....	....	....	.02	....	....	....	.08	.02	.04	....	.09	.05	....	....	....	....	....	.30	.05	.05	.40	....	1.19
Culvers Lake	Delaware	.05	....	....	....	....	T.	....	....	....	....	....	T	....	....	T.	.04	.03	T.	. .	.02	T.	....	....	....	....	....	.23	.05	T.	.42	....	0.84
Dover	Passaic	.04	....	....	....	....	T.	....	....	....	....	....	....	....	....	.04	*	.03	.02	*	.10	.02	....	....	....	....	....	.30	.08	....	.28	....	0.91
ayton	Delaware	....	....	....	....	....	T	....	....	....	....	....	T.	.11	....	.02	.12	....	....	....	....	.07	....	....	....	....	T.	.08	.05	....	.61	....	1.06
ong Valley	Morris	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
ewton	Delaware	.05	T.	....	....	....	T	....	....	....	....	....	T.	....	....	....	.14	T.	....	....	.08	.01	....	....	....	....	T.	.41	.04	....	.39	....	1.12
hillipsburg	...do	.06	....	....	....	T.	....	....	....	....	....	....	T.	T.	T.	.04	T.	....	....	T.	T.	....	....	....	....	....	....	.32	.03	....	.33	....	0.78
ussex	Hudson	.06	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.13	....	....	....	.06	....	....	....	....	....	....	.24	.28	....	.42	....	1.19
The Red Sandstone Plain.																																	
ayonne	Coast	.20	....	....	....	....	....	....	....	....	....	....	....	.08	....	....	....	....	....	....	.06	....	....	....	....	....	....	.20	.40	....	....	....	0.94
oonton ‖	Passaic	.04	.03	....	....	....	....	....	....	....	....	....	T.	....	....	....	.01	.01	.03	T.	.18	.02	....	T	....	....	....	T.	.20	.08	.06	....	0.66
anoe Brook ‖	Essex	....	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	.02	T.	.02	....	.11	.02	....	....	....	....	....	T.	.13	T.	.20	....	0.53
hatham ‖	...do	T.	.04	....	....	....	....	....	....	....	....	....	....	....	T.	....	.02	.02	.03	T.	.09	....	....	....	....	....	....	....	.21	.04	....	....	0.45
lizabeth	Coast	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.02	....	....	.07	.01	....	....	....	....	....	.19	.05	. ..	.29	....	0.66
lemington	Raritan	T.	.01	....	....	....	....	....	....	....	....	T.	....	....	....	.01	....	.04	T.	.03	....	T.	....	....	....	....	....	.34	.08	.09	.18	....	0.78
ersey City	Coast	T.	....	....	....	T.	....	....	....	....	....	....	T.	....	T.	T.	....	T.	T	.10	.02	....	....	....	....	....	....	.18	.09	....	.28	....	0.67
ambertville	Delaware	.01	....	....	....	....	T.	....	....	....	....	T.	....	....	....	T.	.05	....	T.	.10	.20	....	....	....	....	....	....	.39	....	....	.29	....	1.04
ittle Falls ‖	Passaic	....	.02	....	....	....	....	....	....	....	....	....	....	....	T.	T.	T.	T	T.	.30	.03	....	....	....	....	....	....	....	.22	.09	.10	....	0.76
ew Brunswick	Raritan	....	.04	....	....	....	....	....	....	....	....	....	....	T	....	T.	T.	T.	....	T.	.16	.01	T.	....	T.	T.	....	.27	T	.01	.23	....	0.72
ew Milford ‖	Hackensack	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.02	.03	....	....	.19	....	....	....	....	....	....	....	.22	.12	.08	....	0.66
aterson	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
lainfield	Raritan	.04	....	....	....	T.	....	....	....	....	....	T.	....	....	T.	T.	.02	T.	T.	.08	....	....	....	....	....	....	....	.40	.03	....	.25	....	0.82
idgefield**	Hackensack	.01	....	....	....	....	....	....	....	....	....	....	....	....	T.	.01	T.	T.	T.	T.	.05	....	....	....	....	....	T.	.22	.01	....	.36	....	0.66
omerville	Raritan	....	.08	....	....	....	....	....	....	....	....	....	....	....	....	....	.03	.01	....	....	.19	....	....	....	....	....	....	.33	.02	....	.20	....	0.86
erona**	Passaic	.08	....	....	....	....	T.	....	....	....	....	....	T.	....	T.	.01	....	.02	....	.27	.02	T.	....	....	....	....	....	.25	.09	....	.28	....	1.02
oodcliff Lake ‖	Hackensack	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.07	....	....	.47	....	....	....	....	....	....	. ..	.24	.05	.08	....	0.94
ew York, N. Y***	Coast	T.	....	....	....	T.	....	....	....	....	....	....	T	....	T.	T.	T.	T.	T.	.09	.01	....	....	....	....	....	....	.19	.08	....	.24	....	0.61
The Southern Interior.																																	
elleplain	Tuckahoe	....	....	....	....	....	....	....	....	....	....	....	....	.08	....	....	....	....	....	.16	.08	....	....	....	....	....	....	.10	.03	.02	.35	....	0.82
ridgeton	Coast	....	....	....	....	....	....	....	....	....	....	....	....	.02	....	.03	....	....	....	.23	....	....	....	....	....	....	....	.22	....	.32	....	....	0.82
urlington	Delaware	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	T.	.05	T.	.17	.08	....	....	....	....	....	....	.37	T.	T.	.35	....	1.02
ayton	...do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
reehold	Raritan	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	T.	.02	.02	T.	....	.27	....	....	....	.02	....	....	.44	T.	.05	.35	....	1.17
ammonton	Mullica	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	.02	....	.01	....	.10	.03	....	....	....	....	....	....	.32	.02	....	.19	....	0.69
ightstown	Raritan	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
dian Mills	Mullica	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.06	....	.05	....	.33	....	....	....	....	....	....	....	.49	....	....	.25	....	1.18
kewood	Metedeconk	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	.02	....	....	T.	.07	.10	....	....	....	....	....	....	.24	.06	.03	.25	....	0.77
oorestown ‖	Delaware	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.01	....	....	.28	.04	....	....	.03	....	....	....	.01	.38	....	.28	....	1.03
orthfield	Coast	....	....	....	....	....	....	....	....	....	....	....	....	.06	....	.01	....	....	....	.24	....	....	....	....	....	....	....	.10	....	.01	T.	....	0.42
emberton		....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	.13	.01	....	....	....	....	....	....	.32	T.	....	.30	....	0.76
easantville ‖	Coast	....	....	....	....	....	....	....	....	....	....	....	....	T.	.02	.03	....	....	....	.17	.10	....	....	....	....	....	....	....	.17	.03	.02	....	0.54
unyon	Coast	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.53	....	....	....	....	....	.15	....	....	.33	....	1.04
renton***	Delaware	T.	T.	....	....	T.	....	....	....	....	....	T.	T.	T.	T.	.04	.01	....	.01	.16	T.	....	....	....	T.	.01	....	.36	.02	.03	.30	....	0.94
renton No. 2 ‖	...do	....	....	....	....	....	T.	....	....	....	....	....	T.	T.	T.	.04	.03	T	.01	....	.15	T.	....	....	....	.01	T.	T.	.35	.04	.15	....	0.78
ckerton	Coast	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.05	.40	....	....	....	....	....	....	T.	.06	....	.08	....	0.59
ila., Pa***	Delaware	T.	....	....	....	....	....	....	....	....	....	....	....	.01	....	.01	T.	T.	T.	.22	.01	....	....	....	....	T.	....	.40	.01	....	.34	....	1.00
The Sea Coast.																																	
bury Park	Coast	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	T.	....	....	....	.25	....	....	....	....	T.	T.	....	.36	.04	T.	.23	....	0.88
lantic City***	...do	....	....	....	....	....	....	....	....	....	....	....	....	.05	.01	.02	....	....	....	.18	....	....	....	....	....	....	....	.12	.02	T.	.21	....	0.61
pe May	...do	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	.40	....	....	....	....	....	....	....	.04	T.	.02	.07	....	0.53
ng Branch**	...do.	.01	....	....	....	T.	....	....	....	....	....	T.	....	....	....	....	T.	T.	....	.03	....	....	....	....	....	....	....	.12	.06	.07	.16	....	0.45
ndy Hook***	...do	.01	....	....	....	T.	....	....	....	....	....	T.	....	T.	T.	.01	....	T.	T	.18	.05	....	....	....	....	....	....	.28	.04	....	.20	....	0.77

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-
tion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	30.22	30.60	26	29.75	30	12.6	36	nw.	6	81	68	78	60
ng Branch	30.18	30.61	27	29.68	30	......	......	......	......	77	69	70	......
orestown	......	......	......	......	......	......	......	......	......	......	......	......	......
w York, N. Y	30.19	30.60	27	29.67	30	12.8	45	nw.	13	77	67	69	52
iladelphia, Pa	30.22	30.62	26	29.71	30	10.5	34	nw.	5	76	62	67	54
dgefield	30.19	30.60	27	29.66	30	......	......	......	......	......	......	......	......
ndy Hook	30.19	30.58	27	29.64	30	11.7	37	n.	6	83	71	78	44
enton	30.20	30.60	26	29.70	30	8.1	29	nw.	5	81	64	72	72
rona	......	30.60	27	29.68	30	6.2	28	w.	6	78	58	69	......

Daily Temperatures for November, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Charlotteburg	Maximum	54	53	56	60	55	49	42	52	68	75	70	63	70	60	55	56	55	65	64	51	72	73	73	68	63	48	38	31	40	53	....	57.7
	Minimum	34	31	37	44	31	34	37	17	30	35	49	35	57	33	43	47	48	50	47	44	50	49	42	39	46	30	28	24	28	33	....	38.4
Dover	Maximum	65	55	55	60	54	68	46	51	66	79	61	64	71	63	53	60	52	65	55	52	71	71	73	67	58	46	38	33	41	53	....	68.2
	Minimum	36	35	40	43	33	44	19	20	33	41	45	43	45	32	45	49	49	52	49	45	52	52	45	43	36	29	29	26	32	36	....	39.3
Layton	Maximum	42	44	51	51	48	48	45	52	48	76	51	60	61	50	52	58	58	60	60	52	61	62	55	53	54	40	33	30	40	43	....	51.3
	Minimum	29	31	40	34	30	30	14	17	24	26	38	38	46	25	41	47	47	53	44	46	52	47	47	42	40	28	26	26	29	26	....	35.8
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	56	54	59	60	66	46	47	52	66	77	64	66	73	66	54	68	55	68	61	55	71	74	74	71	59	41	34	31	41	52	..	58.7
	Minimum	38	35	38	41	32	28	20	23	34	38	46	42	44	35	40	46	48	49	44	44	51	52	46	46	37	29	25	21	25	34	....	37.7
Phillipsburg	Maximum	55	54	57	59	55	47	47	52	61	70	59	67	71	59	58	64	56	69	57	59	73	71	69	68	58	44	34	32	41	51	....	57.2
	Minimum	41	38	43	38	30	33	26	28	32	34	41	47	44	32	48	52	53	51	51	50	53	51	48	45	40	32	31	30	32	39	....	40.4
Sussex	Maximum	52	50	55	56	54	53	42	51	63	71	63	63	65	....	53	62	59	67	63	53	71	70	70	66	62	49	33	31	38	50	....	56.4[a]
	Minimum	32	32	38	40	32	31	18	21	32	36	45	39	55	....	32	48	46	52	46	46	50	48	32	44	45	28	27	24	27	33	....	37.2[a]
The Red Sandstone Plain.																																	
Bayonne	Maximum	57	60	58	61	57	45	48	55	64	71	62	64	73	72	59	60	54	69	63	60	74	71	74	68	63	57	40	44	43	59	....	60.2
	Minimum	44	50	46	49	35	36	37	39	44	48	56	55	56	56	51	52	50	54	54	52	54	57	58	54	44	40	33	35	35	41	....	47.2
Boonton§§	Maximum	56	55	62	60	58	49	45	53	65	75	63	68	80	63	56	61	62	68	62	56	73	70	72	69	66	58	39	36	44	56	....	60.0
	Minimum	33	34	42	43	30	37	18	20	22	35	42	39	47	34	39	46	50	51	51	46	46	48	43	43	43	45	28	27	27	33	....	88.1
Canoe Brook§§	Maximum	55	55	58	60	58	50	48	53	65	75	62	68	73	63	55	61	64	67	58	58	75	73	74	70	60	60	32	35	42	57	....	59.5
	Minimum	29	32	40	39	26	38	16	18	28	32	39	36	53	25	45	49	50	52	49	47	50	46	42	38	49	29	25	27	29	34	....	37.1
Elizabeth	Maximum	60	58	61	63	61	50	48	56	64	74	63	69	76	66	57	60	56	69	65	57	78	72	77	71	63	53	41	34	43	60	....	60.8
	Minimum	35	37	42	43	32	34	23	26	33	39	48	42	52	36	49	52	52	52	53	49	54	54	49	41	51	33	32	30	32	48	....	41.8
Flemington	Maximum	60	60	60	65	60	48	52	55	65	77	69	70	75	67	58	67	57	70	67	55	75	76	76	69	63	48	38	32	42	60	....	61.2
	Minimum	38	37	40	45	33	36	24	24	30	33	41	45	51	32	47	51	51	54	53	49	53	48	44	41	40	32	30	29	31	35	....	39.9
Jersey City	Maximum	57	57	56	61	54	48	46	55	64	71	61	65	73	62	57	60	54	68	62	58	74	72	73	67	62	44	37	36	43	60	....	58.6
	Minimum	43	42	43	47	41	35	30	37	42	46	53	52	50	44	48	51	50	54	51	51	57	55	56	51	41	36	31	32	34	41	....	44.8
Lambertville	Maximum	58	54	58	60	55	47	47	54	65	73	60	68	72	63	56	71	56	69	55	56	74	75	75	69	57	45	35	32	42	58	....	58.6
	Minimum	40	38	41	45	35	34	24	29	36	42	51	49	54	35	46	51	52	55	45	49	52	52	51	49	42	32	30	28	31	37	....	41.8
Little Falls§§	Maximum	58	58	60	62	57	49	52	55	67	79	64	68	75	68	56	60	65	68	65	58	77	73	77	73	63	59	39	36	44	56	....	61.3
	Minimum	35	37	41	38	31	37	23	22	33	37	47	40	53	34	46	48	50	52	52	46	48	49	45	42	47	33	30	27	28	35	....	39.5
New Brunswick	Maximum	55	54	57	60	55	51	46	53	63	70	63	69	73	62	57	60	54	69	66	55	74	73	72	68	61	55	39	33	41	61	....	59.0
	Minimum	37	40	43	42	33	36	24	28	36	40	45	44	57	37	47	52	51	53	53	49	51	54	48	43	48	32	31	29	31	37	....	41.7
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	57	57	58	62	55	48	47	55	65	72	62	69	74	62	58	60	54	68	63	59	76	74	73	68	63	45	37	34	43	60	....	59.3
	Minimum	40	34	40	41	32	36	20	24	34	38	50	40	53	31	40	49	45	54	52	48	52	52	47	45	50	32	29	28	32	38	....	40.2
Ridgefield	Maximum	65	55	57	62	57	46	46	55	64	74	63	67	74	64	55	57	53	68	55	56	74	71	75	69	59	45	33	31	42	53	....	57.8
	Minimum	40	39	43	45	37	29	26	25	38	44	49	43	56	40	48	50	50	54	49	47	51	55	49	48	37	32	31	26	31	39	....	41.7
Somerville	Maximum	58	58	60	63	58	49	52	55	67	75	62	70	75	66	58	63	55	69	63	56	75	76	75	70	61	48	36	34	42	60	....	60.3
	Minimum	37	37	40	38	29	35	21	23	29	35	43	42	52	30	47	50	52	52	51	49	53	49	44	40	48	30	29	30	32	36	....	39.4
Verona	Maximum	53	53	55	60	55	43	43	52	63	73	59	66	71	60	54	57	53	66	56	54	72	69	72	68	58	41	32	30	41	53	....	56.1
	Minimum	38	37	42	43	36	30	24	26	39	46	47	48	46	39	46	50	50	62	47	46	53	55	55	50	37	33	29	26	30	38	....	41.3
New York, N. Y	Maximum	56	56	56	60	54	47	45	54	63	70	61	63	72	61	56	58	53	68	62	58	71	70	72	66	62	43	37	38	42	60	....	57.8
	Minimum	43	43	44	48	41	34	30	38	43	47	54	53	50	44	49	52	50	53	61	51	57	66	57	52	41	36	31	33	34	42	....	45.2
The Southern Interior.																																	
Belleplain	Maximum	58	56	59	63	59	51	49	56	69	68	68	70	71	65	60	70	58	70	65	73	76	76	74	68	66	53	39	42	50	60	....	62.1
	Minimum	....	....	....	....	....	....	....	25	29	33	36	45	50	28	48	52	51	55	56	51	56	48	40	36	52	30	27	34	35	46	....	41.8[g]
Bridgeton	Maximum	56	57	59	68	58	49	48	58	64	70	67	69	73	66	63	71	58	70	63	72	74	77	74	61	62	47	39	38	48	61	....	61.3
	Minimum	36	38	36	46	33	35	26	31	38	35	41	47	55	36	46	52	48	55	54	53	53	51	45	44	43	33	32	33	34	39	....	41.6
Burlington	Maximum	57	58	59	62	59	55	49	54	64	71	64	71	73	67	60	67	62	71	69	63	77	72	75	71	64	46	52	34	48	62	....	61.9
	Minimum	43	39	39	44	53	41	28	40	30	38	44	50	58	30	50	47	53	55	65	52	50	57	47	43	50	38	32	32	33	42	....	43.1
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	58	54	57	60	57	48	45	55	65	73	61	69	72	61	57	62	63	71	64	59	75	73	73	68	63	47	39	35	43	61	....	59.6
	Minimum	38	41	41	44	32	34	24	30	36	39	45	47	56	37	47	52	55	56	52	50	49	53	50	43	46	33	31	32	32	39	....	42.1
Hammonton	Maximum	60	58	60	64	46	60	48	57	66	73	68	71	72	65	60	69	63	72	65	75	78	78	76	68	68	47	36	36	56	61	....	62.5
	Minimum	35	34	37	40	34	32	21	26	31	38	41	45	42	34	45	53	61	54	53	52	47	49	42	38	45	30	31	31	32	42	....	39.5
Hightstown	Maximum	58	59	56	68	52	46	47	56	64	72	64	72	72	63	60	61	66	72	60	60	77	77	75	68	63	45	38	37	52	54	....	60.5
	Minimum	41	40	46	45	37	21	24	32	36	44	42	54	42	36	51	54	54	54	51	50	53	50	44	43	33	32	30	31	38	42	....	41.7
Indian Mills	Maximum	58	56	61	64	60	54	45	57	67	74	66	71	72	65	58	70	65	70	67	74	77	78	77	68	63	50	43	35	67	61	....	63.1
	Minimum	32	33	35	41	28	35	20	26	29	33	41	44	57	28	46	54	53	55	54	54	49	48	41	38	50	31	31	31	33	43	....	39.9
Lakewood	Maximum	57	54	66	60	56	47	44	54	64	71	61	67	71	60	57	63	66	71	64	65	73	73	40	64	65	47	37	39	45	62	....	59.1
	Minimum	34	37	37	43	30	34	24	25	31	41	43	42	57	36	47	53	53	54	54	54	47	50	45	40	47	33	32	33	34	42	....	41.1
Moorestown	Maximum	57	55	58	61	58	44	46	54	62	70	63	68	72	61	61	66	55	69	60	70	73	74	73	69	60	44	34	32	43	58	....	59.0
	Minimum	36	41	39	43	33	31	27	30	34	39	45	49	42	33	47	52	51	57	54	52	53	51	47	41	37	33	30	30	32	40	....	41.0
Pemberton	Maximum	56	54	57	61	57	48	46	56	64	70	65	70	73	63	59	65	60	70	65	73	76	74	73	68	69	49	38	35	45	62	....	60.7
	Minimum	37	41	39	42	32	37	26	30	34	35	42	48	57	33	48	53	54	55	55	55	53	51	45	42	49	33	33	32	33	41	....	42.2
Pleasantville§§	Maximum	59	60	59	59	59	49	47	55	65	71	68	64	72	64	59	67	60	62	61	70	71	76	74	64	67	46	40	42	54	61	....	60.8
	Minimum	36	33	33	45	30	37	21	25	35	36	43	46	55	29	41	54	52	54	57	53	52	50	43	38	45	27	29	34	36	41	....	40.5
Runyon	Maximum	72	69	68	64	64	58	60	59	58	72	74	74	73	73	70	69	72	72	58	56	54	76	74	72	68	42	36	34	40	38	....	62.3
	Minimum	34	33	34	24	23	20	24	16	22	28	34	34	35	35	36	36	46	38	40	46	46	38	40	38	28	26	30	30	31	32	....	32.6
Trenton	Maximum	55	54	58	60	56	45	47	54	62	69	62	69	71	62	58	68	56	70	61	59	75	72	72	69	62	44	35	36	43	62	....	58.9
	Minimum	41	43	44	47	39	32	28	36	38	42	51	51	50	41	48	52	52	54	50	49	53	54	49	47	37	35	31	30	33	42	....	43.3
Tuckerton	Maximum	70	71	71	66	65	60	62	60	67	69	68	68	68	69	70	70	70	71	68	70	70	69	75	68	65	65	63	60	69	65	....	67.4
	Minimum	40	42	36	35	30	35	36	40	42	40	46	45	39	40	38	40	45	45	50	55	50	48	55	45	45	28	30	36	51	40	....	41.6
Philadelphia, Pa	Maximum	57	56	58	63	59	49	48	54	62	67	63	69	73	62	60	68	59	71	66	66	74	72	72	68	63	46	40	40	48	61	....	60.5
	Minimum	43	46	47	51	43	37	34	40	44	47	54	54	56	49	50	54	54	58	55	54	60	57	54	51	40	38	34	34	39	46	....	47.4
The Sea Coast.																																	
Asbury Park	Maximum	58	55	58	61	58	49	45	53	66	73	61	60	73	61	56	58	55	68	65	63	63	69	66	60	64	45	39	41	45	63	....	58.4
	Minimum	40	42	44	48	39	35	27	35	41	45	51	48	55	44	50	54	53	54	53	54	54	56	53	49	43	36	33	37	35	41	....	45.0
Atlantic City	Maximum	58	56	59	64	59	50	49	55	61	62	63	61	71	61	58	58	57	64	63	64	66	72	67	63	67	47	40	48	49	62	....	59.1
	Minimum	43	41	45	47	42	35	29	43	49	49	50	55	49	44	52	54	53	57	56	55	58	58	54	52	38	33	36	38	39	48	....	46.7
Cape May	Maximum	57	56	60	62	60	49	46	55	62	64	69	64	68	62	62	65	58	64	64	70	69	74	70	61	66	47	42	46	51	60	....	60.1
	Minimum	46	46	41	45	40	38	32	36	49	50	47	56	50	41	55	53	53	58	59	55	57	52	49	46	41	36	36	36	41	49	....	46.4
Long Branch	Maximum	56	56	56	60	57	45	44	53	66	71	63	66	74	63	58	57	54	66	60	54	66	74	75	66	63	47	40	42	43	63	....	58.6
	Minimum	41	40	43	40	36	32	24	30	40	44	50	51	49	40	53	52	50	52	49	49	50	54	50	47	44	34	36	37	33	40	....	43.0
Sandy Hook	Maximum	56	54	56	59	56	49	45	55	60	66	60	61	68	59	56	56	55	67	58	56	68	67	71	63	62	44	39	39	43	60	....	56.9
	Minimum	45	46	47	49	43	36	33	40	42	48	49	49	51	46	51	52	52	55	50	50	52	55	54	50	44	39	34	35	37	43	....	45.9

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.096	.096	.096	.160	.144	*	.160	.064	.064	.064	.048	.064	.036	.078	.016	.032	.016	.010	.004	.048	.064	.112	.064	.016	.096	.096	.106	*	.002	.056	....	1.908
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	.090	.080	.080	.100	.110	.080	*	*	*	.150	.100	.090	.080	.080	.065	.060	.080	.080	.060	.060	.430	.060	.060	.060	*	*	.105	*	*	.330	....	2.885
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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24 NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVI. December, 1931. No. 12

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to he Superintendent of Documents, Government Printing Office, Washington, D. C. It s furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The closing month of the year was characterized by a continu- tion of the unusual warmth which has prevailed almost un- rokenly throughout the year, especially the latter half. The nonth was the fourth warmest December on record, the three varmer ones being 1889 with 41.5 degrees, 1891 with 40.9 de- rees, and 1923 with 40.8 degrees. This one averaged 39.6 de- rees. There were but few days with the temperature below ormal, and only one, the 8th, when it was decidedly below.)n that date, and the 27th and 28th, the lowest temperatures or the month were recorded and ranged generally between 10 nd 20 degrees. The highest points reached by the thermometers were in the sixties and occurred mostly on the 12th.

The relatively dry weather that has prevailed most of the ear continued, the average precipitation being only a little over alf of the normal. In fact, the year 1931 fared but little bet- er than 1930 in the matter of precipitation. Water supplies general are deficient, and the Delaware River continued to ow at a level of nearly two feet below normal. Most of the recipitation occurred during the first half of the month with bout seven rainy days; the latter half had but two to three days ith rain. The only appreciable snowfall was in the higher altudes in the northwestern part of the State where from one to vo inches fell during the 9th. This did not remain on the round long.

There were no reports of damage by windstorms.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from oservations of 39 stations, was 39.6°, which was 6.8° above ormal. The highest temperature was 72° at Runyon on the 2th, and the lowest, 7°, at Runyon on the 28th. The greatest aily range of temperature was 42° at Tuckerton on the 29th. he highest monthly mean temperature was 45.8° at Tuckerton, d the lowest, 31.0° at Layton.

The temperature departure from the normal for the year, 1931, date, by sections, is: The Highlands, +2.8°; Red Sandstone ain, +3.1°; Southern Interior, +2.7°; Sea Coast, +3.1°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from obrvations of 45 stations, was 2.27 inches, which was 1.74 inches low normal. The average total snowfall at 20 selected stans was 0.4 inch. The greatest monthly precipitation was 24 inches, at Chatham, and the least, 1.57 inches at Pember- n. The greatest amount of precipitation in any 24 consecu- e hours was 1.68 inches at Cape May on the 21st-22d. The ean of the number of days on which 0.01 inch or more of preitation fell was 9, or normal.

The precipitation accumulated departure from the normal for e year, 1931, to date, by sections, is: The Highlands, —6.29 ches; Red Sandstone Plain, —8.42 inches; Southern Interior, 8.78 inches; Sea Coast, —12.70 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 12 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 49 miles per hour from the northwest at Sandy Hook and 49 miles per hour at Atlantic City from the west both on the 14th.

MISCELLANEOUS.

The per cent of possible sunshine was 44, or 8 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.11 inches, or 0.01 inch above normal. The highest reading was 30.68 inches at Long Branch on the 8th; the lowest also occurred at Long Branch, namely being 29.60 inches on the 25th.

The mean stage of the Delaware River at Phillipsburg was 2.1 feet, and the highest 3.9 feet on the 16th. The mean stage at Trenton was 0.9 foot, and the highest 2.2 feet on the 17th. The normal at Trenton is 2.6 feet.

Thunderstorms occurred at Hammonton on the 13th, and along the northern coast on the 22d. Dense fog was noted on the 4th, 12th, 14th and 22d. It was quite general on the 14th and 22d. Light hail fell at Jersey City on the 22d. Sleet occurred on the 4th at Plainfield.

OCMPARATIVE DATA FOR DECEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	35.3	60	6	3.15	4.33	2.47	......	......	......	......	......
1886	29.1	60	−2	3.51	4.65	1.62	......	......	......	......	......
1887	33.7	62	6	5.29	7.32	3.64	......	......	......	12	10
1888	34.9	65	5	3.69	4.95	2.05	......	......	......	8	8
1889	**41.5**	71	8	1.62	3.69	**0.25**	......	......	......	9	9
1890	30.9	56	3	3.89	5.74	2.34	......	11	10	10	8
1891	40.9	71	9	4.25	5.32	2.25	......	13	9	9	8
1892	30.4	68	1	1.87	3.09	1.30	......	9	11	11	6
1893	34.9	70	5	3.39	4.66	1.67	......	11	10	10	11
1894	34.8	66	−3	4.36	6.39	1.64	......	12	9	10	9
1895	37.2	70	3	2.61	5.42	1.71	0.4	11	9	11	6
1896	31.3	64	−15	**1.48**	2.70	0.85	10.7	14	9	8	4
1897	35.1	69	−3	4.90	6.44	3.07	3.4	8	11	12	11
1898	33.3	66	−2	3.53	4.85	2.38	2.0	12	10	9	9
1899	35.5	69	−1	2.11	4.30	1.29	0.5	14	10	7	7
1900	34.4	64	−2	2.59	3.97	1.47	4.1	14	10	7	6
1901	32.6	68	−8	**7.30**	**9.45**	4.87	2.1	12	9	10	11
1902	31.7	62	−11	7.23	8.99	5.81	9.1	13	7	11	13
1903	28.6	56	−13	4.08	5.49	3.20	9.2	14	9	8	9
1904	27.0	60	−15	3.19	5.38	2.06	**21.1**	10	7	14	12
1905	36.3	61	5	3.65	5.60	2.58	1.5	14	8	9	7
1906	33.0	70	−5	3.99	6.18	2.70	1.4	9	8	14	13
1907	36.6	70	−3	4.91	7.13	3.55	5.9	12	8	11	9
1908	34.0	**72**	1	3.63	5.26	2.10	7.8	10	8	13	11
1909	29.8	60	−15	4.45	5.51	3.55	12.6	14	8	9	5
1910	26.5	58	−14	2.79	4.60	1.92	11.3	11	10	10	9
1911	38.4	70	2	3.77	5.09	2.94	5.6	10	7	14	11
1912	36.9	68	−1	4.73	6.33	3.40	11.0	12	9	10	9
1913	37.7	63	−11	3.03	4.59	1.47	0.8	13	9	9	7
1914	31.1	66	−9	5.86	9.12	2.99	2.4	10	6	15	12
1915	31.9	64	3	4.82	7.83	2.19	13.6	12	9	10	8
1916	32.3	70	−8	4.61	6.34	3.35	12.6	13	8	10	11
1917	**24.8**	54	**−21**	3.18	5.46	1.55	11.5	13	7	11	8
1918	37.5	66	9	3.92	4.94	3.21	0.5	12	7	12	10
1919	28.8	67	−18	2.98	5.14	1.84	6.8	10	8	13	12
1920	36.4	69	7	5.10	6.63	2.86	1.0	11	8	12	8
1921	32.3	64	−4	2.37	3.23	1.62	6.2	13	8	10	9
1922	32.5	65	−8	3.86	5.26	3.09	7.3	9	9	13	12
1923	40.8	69	9	4.14	5.14	2.44	2.6	13	7	11	12
1924	32.8	68	−4	2.58	3.42	1.85	0.4	10	8	13	8
1925	34.0	61	−5	2.84	4.58	1.08	0.6	13	7	11	10
1926	28.4	52	−7	3.44	4.74	1.67	8.2	11	7	13	11
1927	35.3	70	2	4.54	5.76	2.80	**T.**	13	6	12	12
1928	36.3	63	3	1.64	4.63	0.69	2.7	15	5	11	8
1929	33.8	68	2	3.01	4.34	1.00	4.1	11	6	14	10
1930	33.0	60	−5	2.67	3.92	1.58	5.2	10	7	14	8
1931	39.6	72	7	2.27	3.24	1.57	0.4	13	5	13	9
Normal	32.8	......	......	4.01	......	......	5.7	12	9	10	9
Extremes	......	72	−21	......	9.45	0.25	......	......	......	......	......

W. B. O. Philadelphia-1-23-32-830.

Climatological Data for December, 1931

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	37.1^{b}	+6.5	59	23	16	27	28	2.32	−1.75	0.85	1.5	7	13	1	17	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	39	36.3	+6.5	65	12	10	6	26	2.50	−1.83	0.54	2.0	12	16	2	13	nw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	30	......	......	......	......	13	6†	....	1.87	−1.79	0.60	2.8	9	14	4	13	ne.	Brice E. Riker.
Dover	Morris	600	47	36.9	+7.0	64	12	15	6	34	2.59	−1.71	0.79	T.	8	9	7	15	......	William C. Harris
Layton	Sussex	480	30	31.0	+3.6	66	12	10	6	26	2.03	−1.91	0.62	2.0	8	9	4	18	nw.	A. M. Depue.
Long Valley	Morris	520	1	......	......	....	......	....	......	...	......	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	47	34.6^{a}	+4.5	66	12	12	8	30	2.22	−1.49	0.65	2.0	7	6	7	18	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§48	37.2	+5.9	62	12	19	27	27	2.10	−1.64	0.79	0.8	7	18	4	9	......	Town Engineer.
Sussex	Sussex	442	36	35.4	+5.5	62	12	14	21†	25	2.19	−1.37	0.58	2.0	10	15	4	12	n.	A. J. W. Mowatt
Means and extremes	......	......	....	35.5	+5.6	66	12	10	6	34	2.23	−1.69	0.85	1.9	8	13	4	14	nw.	
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	40.4	+7.4	64	12	20	8†	26	2.49	−1.89	0.79	T.	8	14	9	8	nw.	William Mann.
Boonton	Morris	400	§41	38.0	......	69	25	14	28	38	2.54	−1.44	0.81	......	10	13	1	17	sw.	John Kline.
Canoe Brook	Essex	173	1	36.6	......	67	12	12	27†	33	2.44	......	0.80	......	8	13	8	10	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	27	......	......	......	......	......	......	...	3.24	−0.93	0.90	1.0	12	14	5	12	......	Paul Molitor, Sr.
Elizabeth	Union	45	52	40.0	+6.7	69	12	19	8†	29	2.04	−1.92	0.69	T	12	15	4	12	nw.	Union County Park Com.
Flemington	Hunterdon	140	§45	39.5	+7.5	68	12	18	27†	34	2.35	−1.41	0.58	2.0	12	17	1	13	nw.	Hiram E. Deats.
Jersey City	Hudson	10	33	40.6	+6.5	66	12	19	8	24	2.26	−1.67	0.75	0.1	9	8	11	12	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	44	38.4	......	66	12	17	8†	31	2.34	−1.53	0.88	T.	12	15	6	10	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§28	38.4	+6.9	69	12	16	28	30	2.28	−1.81	0.78	T.	10	17	3	11	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	78	39.8	+6.6	67	12	17	27	26	2.15	−1.52	0.56	T.	11	10	11	10	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	13	......	......	......	......	......	......	....	2.88	......	1.08	......	11	...	....	....	......	Hackensack Water Co
Paterson	Passaic	80	60	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Vincent A. Messineo.
Plainfield	Union	120	43	39.1	+6.4	66	12	16	28	31	1.87	−2.19	0.70	0.5	5	12	5	14	nw.	S. K .Pearson.
Ridgefield	Bergen	80	14	38.2	......	67	12	17	27	26	2.48	......	0.93	0.4	9	8	7	16	nw.	George P. Kirsten.
Somerville, near	Somerset	70	48	37.6^{d}	+5.4	69	12	15	27	34^{d}	2.23	−1.62	0.84	0.3	7	14	3	14	nw.	Julius Gerlich.
Verona	Essex	490	5	37.2	......	65	12	17	8†	25	2.46	......	0.89	0.7	11	9	10	12	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	13	......	......	......	......	......	......	....	2.75	......	0.97	......	9	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	61	40.6	+5.6	66	12	19	8	23	2.22	−1.40	0.72	T.	9	7	9	15	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	38.8	+6.7	69	12†	12	27†	34	2.42	−1.63	1.08	0.4	10	13	6	12	nw	
The Southern Interior.																				
Belleplain	Cape May	30	37	42.1	+7.0	64	14	15	28	34	2.55	−1.40	1.36	0	8	7	6	18	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	48	42.4	+6.1	67	12	20	8†	28	1.81	−2.01	0.77	0	7	16	6	9	nw.	Bennett K. Matlack
Burlington	Burlington	12	§45	42.8	+9.0	63	12†	20	28	31	1.94	−2.38	0.72	0	10	12	6	13	sw.	Public Service Power Co.
Clayton	Gloucester	134	31	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶26	41.0	......	66	12	17	27	26	1.87	−1.85	0.62	0	11	18	1	12	nw.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§25	41.7	......	70	12	17	27†	34	2.10	−1.50	0.86	0	8	17	6	8	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	37	41.8	+9.2	67	12	18	25†	37	1.81	−1.88	0.70	0	5	18	2	11	w.	S. Elwood Crowshaw.
Indian Mills‡‡	Burlington	76	42	41.8	+8.0	68	12	16	28	32	2.31	−2.09	0.90	0	8	8	7	16	nw.	James M. Armstrong.
Lakewood	Ocean	54	27	40.8	+7.3	65	14	16	28	29	2.02	−2.62	0.76	0	10	13	4	14	nw.	R. W. Holman.
Moorestown	Burlington	......	68	39.2	+5.7	64	14	18	27	25	1.72	−1.92	0.75	0	9	13	4	14	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	24	......	......	......	......	......	......	....	2.49	−1.63	1.40	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	....	41.6	......	65	12	20	8	27	1.57	......	0.65	0	11	10	4	17	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§33	41.2	......	70	12	15	28	33	3.02	−1.22	1.32	......	10	20	1	10	nw.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	7	37.4	......	72	12	7	28	34	2.01	......	0.63	......	9	17	4	10	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	59	40.5	+6.1	67	12	20	8	23	2.36	−0.99	0.87	T.	7	8	7	16	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	6	......	......	......	......	......	......	....	2.39	......	0.81	T.	12	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	38	45.8	+11.4	70	12	16	27	42	2.50	−2.01	1.50	0	9	17	0	14	nw.	John H. Brown.
Philadelphia, Pa	......	117	60	44.2	+7.9	65	12	23	8	24	1.78	−1.65	0.72	T.	7	7	9	15	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	41.4	+7.8	72	12	7	28	42	2.15	−1.81	1.50	T.	9	14	4	13	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	42	43.0	+8.0	66	12	20	8	25	1.73	−2.12	0.59	T.	7	22	4	5	nw.	Information Bureau.
Atlantic City	Atlantic	16	58	43.8	+7.4	67	12	21	8	26	2.57	−1.37	1.64	0	7	8	10	13	w.	U. S. Weather Bureau.
Cape May	Cape May	17	47	44.4	+6.4	62	12	24	8	26	2.34	−1.44	1.68	T.	6	7	11	13	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	22	39.6	+5.5	69	12	18	27	29	2.77	−1.97	0.86	T.	9	10	8	13	nw.	William D. Martin.
Sandy Hook	Monmouth	22	33	41.0	+6.6	59	12	22	8	20	1.62	−2.42	0.47	T.	7	7	8	16	w.	U.S. Weather Bureau.
Means and extremes	......	......	....	42.4	+6.8	69	12	18	27	29	2.21	−1.86	1.68	T.	7	11	8	12	nw.	
For the State	......	......	....	39.6	+6.8	72	12	7	28	42	2.27	−1.74	1.68	0.4	9	13	5	13	nw	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for December, 1931

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware				.85					.65	.11	.07		.42							.10		.12										2.32
Charlotteburg	Passaic				.54	.12		.05		.50	.24	.06	.03	.49	.06						.02		.12	.27									2.50
Culvers Lake	Delaware		T.		.37			T.	T.	.60	.06	.08		.57	.05	T.					.02		.02	.10	T.								1.87
Dover	Passaic				.79			T.		.77		.09		.30	.06						.12		.40		.06								2.59
ayton	Delaware				.44			T.		.55	T	.20	.01	.62	.10						.06		.05	T.									2.03
Long Valley	Morris																																.....
Newton	Delaware		T.	.60	T.			T.	T.	.65	T.	.08	T	.50							.06		.08	.25									2.22
Phillipsburg	...do		T.		.79	T.		T.		.54		.09		.13	.03						.15		.37	T.	T.								2.10
ussex	Hudson				.51			T.		.32	.33	.17		.58	.08						.06		.03	.05		.06							2.19
The Red Sandstone Plain.																																	
Bayonne	Coast				.79			T.		.78	.09			.28	.10						.05		.38		.02								2.49
Boonton ‖	Passaic	.13	T.		T	.75			T.		.81		.06	.09	.09	T.					.01	T.	.02	.55		.03							2.54
Canoe Brook ‖	Essex	.11			.08	.75			T.	.03	.80		T.		.21	T.					.05	T.	T.	.41		T.							2.44
hatham ‖	...do	.31			.05	.72			.07		.90			.04	.13	.09					.29		.09	.51		.04							3.24
lizabeth	Coast		T.		.69	01		T.		.63	.11	.03	.02	.13	.08						.06		.16	.11		.01							2.04
Flemington	Raritan		T.		.58	.18				.54	.14	.08	.03	.21	.16					.02	.08		.20	.13		T.							2.35
ersey City	Coast		T.		.70			T.		.75		.02		.17	.07						.08		.40	.06	.01								2.26
ambertville	Delaware			.88	.03		T.			.62	.02	.06	.02	.06	.09						.06		.30	.17		.03							2.34
ittle Falls ‖	Passaic	.12	T.		.05	.78				.78		.04	05	.12								.03	.01	.30									2.28
New Brunswick	Raritan		T.		.54	.09		T.		.56	.05	.05	.02	.20	.09		T.				.08		.27	.20									2.15
New Milford ‖	Hackensack	.18			.03	.92			.02		1.08		.10	.09	.11	.04								.26		.05							2.88
aterson	Passaic																																.....
lainfield	Raritan				.57					.70		T.		.08							.10		.42										1.87
idgefield**	Hackensack		T.		.93			.02		.90		.03		.04	.12						.05			.36	.03	T.							2.48
omerville	Raritan				.84					.62		.06		.07	.11						.13		.40										2.23
erona**	Passaic		.01		.73			.02		.89			.03	.18	.03						.09		.37	.08	.03	T.							2.46
Woodcliff Lake ‖	Hackensack				.06	.97					.89		.08	.28	.11							.05		.13		.08							2.75
ew York, N. Y***	Coast		T.		.69			T.		.72		.02		.17	.08						.07		.40	.06	.01								2.22
The Southern Interior.																																	
elleplain	Tuckahoe				.11	T.		.06		.80	T.	.09			.06								1.36	.05		.02							2.55
ridgeton	Coast				.03			.05		.73		.10		.11	.02								.77										1.81
urlington	Delaware				.35	.07				.72	.07	.07	T.	.10	.07						.06		.31	.12									1.94
layton	...do																																.....
reehold	Raritau				.39	.11				.62	.13	.04	.01	.09	.04						.10		.30	.04		T.							1.87
ammonton	Mullica				.33					.86	.07	.07		.05	.01						.01		.70		T.		T.						2.10
ightstown	Raritan					.50				.70		T.		.15							T.	.06		.40									1.81
dian Mills	Mullica				.38	.05				.90	.20	.13		.05	.04						T.		.56										2.31
akewood	Metedeconk				.38	.06				.70	.06	.04	.04	.06	.04						.12		.52		T.								2.02
oorestown ‖	Delaware			.02	.27					.75		.07		.14	.02					.04		.08	.33										1.72
orthfield	Coast				.08			.01		.85	.04	.06		.03	.02								1.40										2.49
emberton					.30	.02				.65	.05	.02	.01	.06	.04						.04		.33	.05									1.57
easantville ‖	Coast	.28			.02	.13		T.		T.	1.08		.10	.05	.02	.02						T.	.37	.95									3.02
unyon	Coast				.63					.34		.19	.20	.10	.11						.07		.25	.12									2.01
renton***	Delaware		T.		.50	T.		T.		.87		.04	T.	.28	.03						.17	T.	.47										2.36
renton No. 2 ‖	...do	.14	T.		.02	.50			T.		.81	T.	.06	.02	.24	.02					.12	.04	.03	.39		T.							2.39
ckerton	Coast				.05					.62	.08		.10	.03	.05						.04		1.50			.03							2.50
ila., Pa***	Delaware				.33					.72		.06		.14	.03						.04	T	.46		T.								1.78
The Sea Coast.																																	
sbury Park	Coast				.35			T.		.59		.05		.12	.06						.10		.46										1.73
lantic City***	...do				.11		.01			.70		.06	T.	.03	.02						T.		1.64		T.	T.							2.57
pe May	...do	T.			.03					.50		.02		.02	.09								1.68										2.34
ong Branch**	...do				.37			T.		.86		.33	.06	.18	.26						.16		.46	.09	T.	T.							2.77
ndy Hook***	...do				.45			T.		.47		.06	T.	.17	.04						.07		.36		T.								1.62

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	30.12	30.67	8	29.67	25	15.4	49	w.	14	74	63	66	49
ng Branch	30.12	30.68	8	29.60	25	......	......	......	......	76	63	70	......
orestown													
w York, N. Y	30.10	30.67	8	29.63	25	16.0	58	nw.	14	70	63	63	54
iladelphia, Pa	30.14	30.71	8	29.66	25	12.0	37	n.	26	66	58	58	44
dgefield	30.10	30.67	8	29.62	25								
ndy Hook	30 09	30.67	8	29.62	25	14.7	49	nw.	14	78	68	72	38
enton	30.12	30.67	8	29.65	25	9.4	41	nw.	14	73	59	63	44
rona	......	30.66	8	29.62	25	7.8	41	w.	7	68	56	60	......

Daily Temperatures for December, 1931

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	50	42	46	....	....	41	41	33	38	41	43	56	49	54	44	44	50	44	57	47	38	45	59	57	55	35	40	36	45	43	37	45.2ᵇ
	Minimum	35	31	21	....	....	18	28	17	24	33	37	42	35	39	32	24	27	33	29	36	19	32	43	43	34	24	16	18	20	27	24	29.0ᵇ
Charlotteburg	Maximum	52	41	48	48	47	36	40	31	36	42	41	65	62	45	40	43	49	50	55	52	36	44	59	59	52	31	38	37	41	41	38	45.1
	Minimum	38	29	25	26	29	10	28	14	17	35	35	39	37	37	30	20	24	27	38	39	13	33	43	38	32	20	14	13	26	26	17	27.5
Dover	Maximum	45	40	48	43	47	39	40	30	40	41	45	64	55	51	42	43	50	44	57	48	39	49	60	56	51	41	39	37	43	43	55	46.0
	Minimum	35	28	25	49	20	15	21	16	21	38	37	37	37	37	26	23	25	31	33	26	18	46	46	43	28	21	17	16	23	22	21	27.8
Layton	Maximum	47	37	40	40	40	33	33	25	32	38	42	66	41	43	43	39	42	42	40	40	30	40	48	41	52	28	28	33	27	29	29	38.3
	Minimum	35	28	15	24	23	10	24	14	18	31	31	40	31	38	27	20	21	21	29	29	12	30	31	32	28	21	14	11	13	20	15	23.8
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	50	40	50	48	40	32	42	32	38	41	43	66	48	....	44	44	49	45	60	50	33	45	62	57	55	38	33	40	34	45	35	44.6ᵃ
	Minimum	35	25	21	19	18	13	21	12	20	31	34	38	34	....	26	21	27	31	31	25	13	30	41	43	25	21	19	13	15	17	16	24.5ᵃ
Phillipsburg	Maximum	47	42	49	44	46	34	41	31	38	44	44	62	45	53	43	45	50	44	57	44	36	48	59	57	54	33	41	36	45	44	37	44.9
	Minimum	36	26	22	28	24	21	27	20	26	35	37	39	37	39	30	24	28	31	31	29	22	36	46	45	29	27	19	20	24	28	24	29.4
Sussex	Maximum	47	51	45	45	48	32	41	33	32	41	41	62	52	52	54	43	48	43	53	48	32	42	57	54	54	33	36	34	38	38	34	44.0
	Minimum	37	30	20	30	29	15	28	16	20	30	34	38	31	37	30	22	24	30	30	28	14	32	40	41	31	23	16	14	15	26	18	26.7
The Red Sandstone Plain.																																	
Bayonne	Maximum	51	40	42	44	43	40	40	38	52	48	49	64	54	54	42	46	51	45	56	49	45	57	58	58	56	35	39	37	44	42	32	47.0
	Minimum	41	32	33	32	30	30	29	20	29	42	42	52	46	42	32	31	37	36	36	32	35	44	44	48	30	22	20	26	25	24	23	33.7
Boonton§§	Maximum	48	45	50	60	46	41	54	36	44	45	44	66	43	64	45	47	57	45	59	46	40	53	62	58	69	48	40	35	45	45	38	49.0
	Minimum	36	31	19	22	35	15	24	17	18	25	36	36	36	39	34	19	24	25	29	38	17	21	38	40	40	24	25	14	16	27	19	27.1
Canoe Brook§§	Maximum	48	41	50	48	40	39	43	31	45	44	48	67	48	55	43	46	50	47	59	47	40	53	61	57	50	50	42	36	45	45	38	47.0
	Minimum	33	30	18	29	35	13	25	17	19	25	35	40	30	40	32	19	21	31	26	30	15	24	40	39	44	24	12	12	14	21	20	26.2
Elizabeth	Maximum	55	46	51	47	52	38	45	41	47	49	45	69	57	55	55	47	52	46	60	55	40	51	63	58	53	36	42	38	47	46	41	49.3
	Minimum	32	31	22	32	34	24	30	19	24	38	38	41	38	42	33	23	26	33	32	36	22	38	48	42	35	26	19	19	20	26	25	30.6
Flemington	Maximum	55	45	51	47	46	35	41	36	38	45	44	68	57	54	54	49	52	47	63	52	40	48	64	58	54	37	48	41	51	50	45	48.9
	Minimum	35	31	21	28	32	19	29	19	23	36	36	40	38	42	33	23	25	33	29	36	22	33	47	41	37	25	18	18	33	26	24	30.1
Jersey City	Maximum	50	42	50	51	48	41	42	33	51	47	50	66	52	56	42	45	50	45	60	47	45	55	62	56	53	35	40	39	44	46	39	47.8
	Minimum	40	33	32	39	30	28	25	19	27	40	41	44	43	40	30	31	36	37	38	34	24	43	49	46	33	25	20	26	27	30	24	33.4
Lambertville	Maximum	55	42	49	49	39	42	40	34	45	47	46	66	55	54	48	47	50	45	60	44	40	49	60	57	53	35	42	37	47	44	37	47.0
	Minimum	41	27	30	28	19	29	24	17	24	36	37	35	42	42	27	24	28	34	34	36	20	29	49	45	29	24	17	20	26	27	21	29.7
Little Falls§§	Maximum	50	45	51	52	41	41	44	38	47	46	46	69	46	56	44	48	52	48	60	44	40	55	65	59	53	37	42	36	47	48	39	48.0
	Minimum	40	31	21	31	35	18	28	18	22	27	36	39	34	40	35	20	26	33	31	34	19	26	39	42	44	24	17	16	17	26	21	28.8
New Brunswick	Maximum	55	44	49	45	50	36	43	35	47	49	44	67	60	56	56	47	52	47	59	51	39	50	60	59	55	33	41	37	45	44	38	48.2
	Minimum	39	31	23	35	33	21	31	19	28	36	38	41	41	42	32	26	27	35	34	37	22	37	49	44	33	25	17	18	25	26	29	31.4
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	50	42	51	51	41	40	42	32	51	47	50	66	53	55	42	47	50	44	61	48	45	55	62	57	53	36	40	39	46	47	39	47.8
	Minimum	36	31	22	31	27	19	25	18	22	34	38	45	45	45	31	23	25	33	30	35	24	42	50	42	33	25	18	16	25	30	22	30.4
Ridgefield	Maximum	48	42	49	50	39	38	43	30	50	46	48	67	45	55	42	46	50	44	58	41	39	48	63	58	54	36	39	33	45	45	39	46.1
	Minimum	40	30	27	35	22	20	22	18	24	37	39	45	40	39	28	27	31	36	35	26	20	37	47	45	45	21	17	18	19	27	21	30.3
Somerville	Maximum	51	45	51	45	47	35	44	34	45	45	44	69	54	54	46	48	53	44	62	43	37	51	....	....	....	....	62	38	49	48	37	47.6ᵈ
	Minimum	35	28	21	27	34	17	29	19	23	34	37	39	38	42	30	22	24	30	28	35	20	34	....	....	....	....	15	16	21	25	20	27.5ᵈ
Verona	Maximum	47	39	47	48	48	38	42	29	47	43	47	65	42	53	42	44	49	42	57	40	40	48	60	56	52	33	38	35	42	42	32	44.7
	Minimum	33	28	28	36	23	18	21	17	24	39	39	46	40	40	27	26	31	35	37	23	19	40	47	46	29	22	17	20	21	26	21	29.6
New York, N. Y	Maximum	50	41	50	51	49	41	42	33	51	47	50	66	53	55	42	45	50	45	58	48	44	56	62	56	53	35	40	88	45	46	39	47.8
	Minimum	40	33	32	39	31	29	23	19	28	41	41	45	43	40	30	31	36	37	38	28	24	44	49	47	31	24	20	27	27	30	24	33.3
The Southern Interior.																																	
Belleplain	Maximum	61	46	51	59	59	53	50	42	56	57	52	58	62	64	59	50	53	52	62	53	49	60	62	61	60	42	43	43	48	46	41	53.4
	Minimum	40	29	17	39	36	20	32	16	23	33	38	48	50	50	30	18	21	26	31	31	31	45	46	39	40	27	16	15	21	23	24	30.8
Bridgeton	Maximum	60	45	50	58	52	51	50	33	52	51	51	67	61	64	58	49	53	53	62	56	47	58	62	61	57	39	42	42	48	46	42	52.8
	Minimum	37	31	24	38	32	23	21	20	25	35	41	44	47	48	31	24	26	33	35	38	29	43	45	42	35	27	20	23	26	27	27	32.5
Burlington	Maximum	61	47	50	56	53	49	45	41	48	50	48	63	63	62	60	48	52	49	61	52	57	56	61	61	57	42	43	40	47	46	45	52.0
	Minimum	38	34	26	34	37	29	26	21	26	38	37	48	50	46	35	25	26	34	35	42	26	39	48	45	39	27	25	20	27	33	25	33.6
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	61	43	49	57	57	46	44	37	48	52	46	66	57	64	56	46	54	47	58	52	52	56	60	58	56	36	39	39	46	44	35	50.4
	Minimum	39	32	24	33	33	22	32	19	24	37	38	43	45	44	61	25	29	35	34	40	26	38	49	44	35	25	17	20	24	22	24	31.7
Hammonton	Maximum	60	45	51	57	57	49	52	45	53	54	49	70	56	65	65	50	54	52	61	48	45	58	62	67	62	50	43	42	47	37	40	53.4
	Minimum	36	30	25	34	23	19	30	19	21	35	40	45	46	48	31	22	23	28	32	33	27	39	43	42	32	25	17	17	23	21	24	30.0
Hightstown	Maximum	65	52	47	52	58	56	44	37	53	46	58	67	60	46	52	48	58	48	58	45	58	56	60	63	55	46	41	39	45	43	43	51.6
	Minimum	39	44	25	34	38	21	28	23	33	38	42	43	32	30	25	27	33	33	31	24	28	54	40	46	18	24	18	26	36	27	32	32.0
Indian Mills	Maximum	61	46	52	57	57	49	49	41	50	53	50	68	61	65	60	50	53	59	62	57	45	57	61	64	57	40	40	40	46	44	40	52.7
	Minimum	35	32	30	30	38	22	29	19	24	36	40	43	45	46	30	20	21	28	32	33	28	39	45	42	40	26	17	16	21	24	24	30.8
Lakewood	Maximum	61	45	50	58	58	48	45	36	52	54	49	64	52	65	55	47	53	48	59	52	43	58	60	57	56	36	39	40	46	42	35	50.4
	Minimum	35	32	22	30	32	22	32	20	25	38	38	45	47	46	29	20	24	33	32	33	29	39	47	43	36	27	20	16	22	27	23	31.1
Moorestown	Maximum	47	41	47	55	48	44	44	30	50	46	50	62	50	64	42	46	51	46	59	43	33	49	57	61	60	45	34	38	47	43	37	47.4
	Minimum	38	28	26	37	26	22	23	19	25	36	40	46	44	40	25	24	26	32	35	31	20	35	46	46	48	24	18	25	25	27	25	31.0
Pemberton	Maximum	61	45	49	58	59	48	46	37	53	50	47	65	59	59	58	47	51	46	60	56	44	58	60	62	56	42	41	38	46	42	38	51.0
	Minimum	39	30	23	36	32	26	30	20	26	37	39	44	48	46	35	24	26	30	34	36	27	41	46	45	39	26	21	21	23	27	25	32.3
Pleasantville§§	Maximum	49	44	52	59	52	50	49	43	55	51	54	70	57	64	54	50	53	52	62	49	54	57	62	59	53	50	42	40	43	48	45	52.3
	Minimum	39	31	21	27	41	19	31	17	22	35	39	43	48	49	30	17	21	24	31	33	32	34	45	39	43	28	18	15	19	21	23	30.2
Runyon	Maximum	46	44	50	50	50	50	44	38	44	48	52	72	48	68	48	40	33	41	40	40	42	50	64	62	54	44	34	39	38	40	32	46.8
	Minimum	18	24	36	38	28	18	27	27	19	36	32	38	38	38	30	27	15	26	32	34	26	35	40	40	38	26	18	7	18	20	15	27.9
Trenton	Maximum	48	42	49	55	48	44	44	33	51	46	52	67	54	61	44	48	52	46	59	45	46	57	60	60	53	35	40	41	46	43	36	48.5
	Minimum	38	32	28	38	25	24	23	20	28	37	40	44	44	39	31	28	33	38	38	29	25	43	51	47	30	25	20	26	29	30	25	32.5
Tuckerton	Maximum	55	55	60	62	65	62	60	56	60	59	61	70	63	65	60	60	61	58	60	57	60	60	60	60	57	42	52	50	60	61	60	59.1
	Minimum	32	26	32	32	36	38	40	18	30	31	35	45	48	45	30	22	28	35	38	35	34	45	46	45	40	27	16	28	18	22	26	32.6
Philadelphia, Pa	Maximum	51	45	50	55	52	49	48	35	51	50	54	65	59	63	45	50	51	50	62	52	48	58	63	62	57	69	43	41	49	46	40	51.1
	Minimum	43	37	34	43	29	29	29	23	33	42	46	52	48	44	37	33	38	42	41	37	31	46	51	51	33	28	25	34	35	33	30	37.8
The Sea Coast.																																	
Ashury Park	Maximum	55	42	50	58	53	47	45	32	53	55	50	66	57	65	51	48	55	50	60	50	49	56	61	53	57	37	41	40	47	43	39	51.1
	Minimum	41	33	28	38	34	34	32	20	28	39	41	47	47	45	33	29	33	38	39	38	31	44	50	48	34	27	21	26	27	30	30	35.0
Atlantic City	Maximum	54	44	51	58	51	50	48	33	54	52	54	67	57	63	46	49	52	52	62	51	51	57	62	57	59	39	43	40	49	48	42	51.5
	Minimum	39	34	36	51	31	31	28	21	30	38	54	53	49	43	33	33	35	37	43	37	34	47	48	49	33	27	22	29	30	28	30	36.2
Cape May	Maximum	53	45	53	59	53	54	52	36	53	52	52	62	59	61	45	53	55	50	60	60	52	56	60	60	60	39	40	46	47	44	46	52.2
	Minimum	43	31	31	50	31	28	32	24	28	39	45	50	51	45	33	29	34	38	45	39	36	48	48	48	35	30	25	26	31	32	29	36.6
Long Branch	Maximum	50	39	50	50	47	41	41	33	50	47	52	69	56	60	40	40	51	45	60	50	44	58	66	60	55	36	40	39	48	48	41	48.6
	Minimum	40	30	24	35	30	26	22	20	26	40	40	40	40	38	28	28	34	33	36	27	21	40	44	46	30	21	18	20	25	28	23	30.7
Sandy Hook	Maximum	49	42	48	53	48	46	47	31	51	45	50	59	49	54	43	46	50	46	44	45	44	54	55	55	52	36	40	37	44	42	36	46.7
	Minimum	41	36	34	41	30	30	26	22	31	41	42	43	44	41	33	32	36	40	42	32	30	43	48	46	33	29	24	30	31	33	28	35.2

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. *Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION,

HARRY O. GEREN, Meteorologist.

TRENTON, N. J.

OL. XXXV. ANNUAL SUMMARY, 1931. No. 13

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to e Superintendent of Documents, Government Printing Office, Washington, D. C. It furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The year was the warmest on record (47 years) and the sec- nd driest. The rainfall, fortunately, was rather concentrated that important part of the growing season from March to ugust, inclusive. The total during these six months averaged 5 inches and this is nearly 70% of the annual amount which as 37 inches. The average total is only slightly more than that the drought year of 1930, but, as pointed out above, the dis- ibution was such that the general crop results were quite dif- rent. The Sea Coast region experienced a greater deficiency an any other part of the State, having an annual average of ly 32 inches.

The course of the temperature was above normal throughout e year, as viewed from the standpoint of the monthly aver- ges. Especially was this true of the Fall and Winter, Septem- er and November breaking their respective records for warmth, d October and December ranking near the top in average tem- eratures for those months. Below-zero temperatures were re- rded at only a few stations and these in the Highlands; they curred in January and February. The last killing frosts of ring were reported at about the normal dates or a little earlier, nging from late in March over the Sea Coast region to early ay in the Highlands. The Summer was not excessively warm a whole, but July became the second warmest July on record. ith the late advent of the first killing frosts of Autumn the owing season was extended several weeks longer than the nor- al.

The precipitation record shows that for the State as a whole months except two had less than the normal amount. These o were June and August. However, the Summer's rainfall s nearly normal, except in the Sea Coast section. The snow- ll for the calendar year was less than in any year on record he record beginning with 1895) with the exception of the ar 1913. A comparatively light snow cover existed at times er most of the northern part of the State during January and bruary.

Crop harvests were about normal in amount for the State as whole, in spite of a reduced acreage. Had the precipitation t favored the growing months as it did, there would probably ve been a decided shortage in the harvests.

There was considerable damage by wind and waves along the rth Jersey shore on March 8th. During April, from the 13th 20th, numerous forest fires resulted from favorable conditions dry and windy weather. Destructive hail storms occurred May 10th in Burlington County with a total loss estimated $300,000, mostly to crops. Lightning killed two farmers and ree horses and injured three other men during a storm near idgeton, Cumberland County, in July. All were out in the lds. On the 19th of August, three bathers at Atlantic City re drowned by an unusually high tidal wave. Taken as a ole, the loss of life and destruction of property by untoward ather manifestations was less than usual during 1931.

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Average precipitation	Average snowfall	Year	Temperature			Average precipitation	Average snowfall
	Mean	Highest	Lowest				Mean	Highest	Lowest		
1885	50.5	100	−2	37.87	......	1909	52.0	100	−15	40.86	29.9
1886	50.2	98	−10	46.54	......	1910	52.0	99	−15	39.73	33.3
1887	51.1	102	−6	47.66	......	1911	52.6	104	−12	50.36	30.0
1888	50.0	99	−12	52.20	......	1912	51.3	100	−32	46.61	35.1
1889	52.8	95	−3	**63.33**	......	1913	54.2	100	−11	46.99	5.2
1890	53.2	101	0	49.34	......	1914	51.4	99	−12	39.23	41.1
1891	53.2	102	1	47.98	......	1915	52.5	98	−3	47.37	39.4
1892	51.4	105	−6	42.04	......	1916	51.2	100	−18	38.17	49.6
1893	50.8	103	−21	47.90	......	1917	49.6	104	−21	40.80	40.4
1894	53.0	106	−11	47.37	......	1918	51.2	108	−16	37.65	25.3
1895	51.7	**109**	−12	37.29	25.7	1919	52.5	103	−12	52.10	10.9
1896	51.7	105	−15	42.51	39.5	1920	51.2	98	−17	51.87	33.4
1897	52.0	102	−6	51.72	25.8	1921	54.1	100	−5	38.16	23.0
1898	53.2	107	−15	52.35	34.3	1922	52.6	98	−11	41.57	30.8
1899	52.1	103	−21	45.84	44.3	1923	51.9	106	−14	40.38	39.8
1900	53.8	104	−9	42.71	23.3	1924	50.7	102	−6	44.17	24 3
1901	51.4	107	−8	51.80	14.1	1925	52.1	103	−20	42.15	26.8
1902	51.8	100	−11	59.44	40.1	1926	50.0	105	−11	44.41	32.2
1903	51.7	100	−16	56.25	22.3	1927	52.0	99	−12	49.68	13.7
1904	**49.3**	100	**−34**	43.78	48.5	1928	52.0	99	−15	46.22	21.5
1905	51.3	102	−18	42.06	32.9	1929	52.3	102	−9	42.96	16.0
1906	52.8	98	−15	46.38	23.4	1930	52.8	105	−14	**35.28**	15.6
1907	50.4	96	−22	51.65	54.1	1931	**54.4**	102	−9	37.07	8.6
1908	52.6	106	−17	42.58	35.3						

MONTHLY STATE DATA FOR 1931

Month	Temperature				Precipitation					
	Mean	Departure from normal	Highest	Lowest	Average	Departure from normal	Greatest	Least	Snow	Greatest.
January	31.6	+1.8	64	−5	2.16	−1.46	4.35	1.37	1.6	9.9
February	33.3	+3.9	62	−9	2.18	−1.45	3.42	0.81	3.0	16.5
March	39.2	+0.7	64	12	4.14	−0.30	6.06	2.60	2.0	8.9
April	49.8	+0.4	80	20	2.85	−0.91	5.17	1.53	T.	0.4
May	60.4	+0.1	97	21	3.73	−0.07	6.33	0.77	0.0	0
June	69.3	+1.0	101	40	4.84	+0.96	7.42	2.18	0.0	0
July	76.6	+3.0	102	50	4.24	−0.29	7.55	0.80	0.0	0
August	73.5	+1.5	101	45	5.10	+0.36	9.61	2.26	0.0	0
September	70.5	+5.0	100	34	1.98	−1.54	3.15	0.86	0.0	0
October	58.3	+3.4	92	24	2.76	−0.99	4.69	1.67	0.0	0
November	50.4	+7.4	80	14	0.82	−2.38	1.19	0.42	1.6	5.2
December	39.6	+6.8	72	7	2.27	−1.74	3.24	1.57	0.4	2.8
Year	54.4	+2.9	102	−9	37.07	−9.81	9.61	0.42	8.6	16.5

KILLING FROSTS

Stations	Last in spring	First in autumn	Stations	Last in spring	First in autumn
The Highlands and Kittatinny Valley			Somerville	May 5*	Oct. 13
			Verona	Apr. 30*	Nov. 6*
Belvidere	May 1*	Oct. 13*	*The Southern Interior*		
Charlotteburg	do. 6*	do. 10*			
Culvers Lake	do. 1	do. 10	Belleplain	May 5	....
Dover	do. 1	Nov. 5	Bridgeton	Apr. 30	Nov. 7
Layton	do. 18*	Oct. 13	Burlington	do. 30*	Oct. 19
Long Valley	do. 5*	do. 10*	Clayton	May 5	do. 19
Newton	do. 1	do. 13	Freehold	....	do. 13
Phillipsburg	do. 1*	Nov. 5	Hammonton	May 5	do. 13
Sussex	do. 5*	Oct. 13*	Indian Mills	do. 5	do. 13
			Lakewood	do. 5	do. 13
The Red Sandstone Plain			Moorestown	Apr. 30	do. 13
			Pemberton	May 4	Nov. 5*
			Pleasantville	do. 5*	Oct. 19*
Bayonne	Mar. 12*	Dec. 2*	Runyon	do. 5*	do. 10*
Boonton	May 4*	Oct. 13*	Trenton	Mar. 22*	Nov. 7*
Canoe Brook	do. 5*	do. 13*	Tuckerton	May 6*	Oct. 19
Elizabeth	do. 1	Nov. 5			
Flemington	do. 5	Oct. 19	*The Sea Coast*		
Jersey City	Mar. 18*	Nov. 7			
Lambertville	Apr. 30	do. 7	Asbury Park	Mar. 15*	Nov. 7*
Little Falls	May 1*	Oct. 13*	Atlantic City	do. 21*	do. 7
New Brunswick	do. 4	do. 13	Cape May City	do. 21*	do. 7*
Paterson	Apr. 30	....	Long Branch	Apr. 30	do. 6*
Plainfield	May 1	Oct. 20	Sandy Hook	Mar. 14*	Dec. 5
Ridgefield	do. 4	do. 13	....	....	....

* No frost reported; temperature 32° or below.

W. B. O. Philadelphia 2-10-32-830.

Climatological Data for the Year 1931

STATION	Counties	Elevation, feet	Temperature (degrees Fahrenheit)						Precipitation (inches)							Number days with .01 or more	Sky			Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall (unmelted)		Number clear days	Number partly cloudy days	Number cloudy days	
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	40	......	100	June 20	8	Feb. 3	40	32.20	5.48	July	0.93	Nov.	......	93	201	48	116	......
Charlotteburg	Passaic	719	39	51.7	94	Sept. 10†	1	Jan. 23	39	42.51	7.33	June	1.19	do.	27.5	134	204	35	126	w.
Culvers Lake	Sussex	848	......	......	......	....	−1	do. 15	30	34.15	5.62	do.	0.84	do.	42.0	110	185	70	110	nw.
Dover	Morris	600	47	51.9	95	June 20†	3	Feb. 11	47	44.32	6.96	July	0.91	do.	15.0	118	89	155	121	......
Layton	Sussex	480	30	49.8	97	do. 30	−5	Jan. 2†	30	40.12	7.37	July	1.06	Nov.	30.9	111	138	53	174	sw.
Long Valley	Morris	520	1	......	......	....	......	....	1	38.99	8.43	do.	0.79	do.	......	......	......	......	......	......
Newton	Sussex	769	48	52.0	101	June 20†	3	Feb. 3†	45	38.75	6.32	do.	1.12	do.	30.3	107	132	69	164	sw.
Phillipsburg	Warren	363	40	53.9	99	Aug. 7	11	do. 3	48	32.27	6.56	do.	0.78	do.	7.6	92	200	58	99	......
Sussex	Sussex	442	33	51.8	97	July 1	−9	do. 11	36	36.49	6.26	do.	1.19	do.	26.0	109	179	58	128	n.
Means and extremes	......	......	......	51.8	101	June 20†	−9	Feb. 11	......	37.76	8.43	July	0.78	Nov.	25.6	109	166	69	130	sw.
The Red Sandstone Plain.																				
Bayonne	Hudson	37	33	......	95	June 20	10	Jan. 15	33	40.18	5.14	July	0.94	Nov.	3.7	......	......	......	......	w.
Boonton	Morris	400	23	......	95	do. 20†	5	Feb. 3	41	39.27	7.42	June	0.66	do.	......	116	167	39	159	sw.
Canoe Brook	Essex	173	1	52.1	95	do. 20†	7	Jan. 2†	1	38.64	6.28	do.	0.53	do.	......	106	176	101	88	nw.
Chatham	Morris	185	......	......	......	....	......	....	27	48.84	6.84	do.	0.45	do.	7.7	127	189	78	98	......
Elizabeth	Union	45	47	55.9	99	June 20†	11	Jan. 9	52	35.19	4.92	June	0.66	Nov.	5.8	124	214	64	87	nw.
Flemington	Hunterdon	140	34	55.5	100	do. 20†	8	Feb. 3	45	36.85	4.86	do.	0.78	do.	11.0	117	212	57	96	nw.
Jersey City	Hudson	10	33	55.6	96	July 28†	11	Jan. 15	33	35.26	4.79	Mar.	0.67	do.	7.5	112	127	128	110	nw.
Lambertville	Hunterdon	430	44	54.2	95	do. 1†	8	Feb. 3	44	39.88	7.55	July	1.04	do.	12.2	127	201	56	108	nw.
Little Falls	Passaic	180	17	54.2	99	June 20†	9	Jan. 15†	28	39.70	6.67	June	0.76	Nov.	9.1	125	180	81	104	nw.
New Brunswick	Middlesex	110	74	54.9	96	July 1	11	Feb. 3	78	35.77	5.65	July	0.72	do.	7.4	110	169	119	77	sw.
New Milford	Bergen	9	......	......	......	....	......	....	13	38.23	4.51	June	0.66	do.	......	114	......	......	......	......
Plainfield	Union	120	40	54.1	97	July 1†	9	Feb. 3†	43	40.27	5.75	July	0.82	do.	9.1	109	115	131	119	nw.
Ridgefield	Bergen	80	14	53.8	97	Aug. 7	8	Feb. 3	14	37.10	4.26	Mar.	0.66	Nov.	12.9	112	125	116	124	nw.
Somerville	Somerset	70	47	54.2	98	do. 7	6	do. 3	8	37.16	5.96	June	0 86	do.	5.0	106	162	58	145	nw.
Verona	Essex	490	6	52.7	93	June 20	8	Jan. 15†	6	39.46	5.48	May	1.02	do.	17.6	130	121	120	124	nw.
Woodcliff Lake	Bergen	100	......	......	......	....	......	....	13	36.64	5.17	Apr.	0.94	do.	......	110	......	......	......	......
New York, N. Y.	....	365	61	55.2	95	Sept. 11	11	Jan. 15	61	35.50	4.74	Mar.	0.61	Nov.	6.7	119	100	125	140	nw.
Means and extremes	......	......	......	54.3	100	June 20†	5	Feb. 3	......	38.77	7.55	July	0.45	Nov.	9.1	116	166	88	111	nw.
The Southern Interior.																				
Belleplain	Cape May	30	36	......	98	Sept. 11	4	Feb. 1	37	32.50	7.72	Aug.	0.82	Nov.	......	89	115	72	178	nw.
Bridgeton	Cumberland	30	43	56.5	100	Aug. 3	14	Jan. 14	48	36.31	9.61	do.	0.82	do.	1.6	93	211	64	90	sw.
Burlington	Burlington	12	19	57.0	99	do. 7	14	Feb. 3†	45	42.88	6.69	do.	1.02	do.	2.3	107	162	87	116	sw.
Clayton	Gloucester	134	32	......	103	July 1	12	Jan. 16	32	35.92	7.17	do.	0.85	do.	......	......	......	......	......	nw.
Hammonton	Atlantic	80	1	55.8	101	Aug. 3†	12	do. 16	25	33.60	7.18	do.	0.69	do,	2.1	91	202	73	90	w.
Indian Mills	Burlington	76	42	55.5	100	Aug. 7	9	Jan. 8†	41	38.58	7.36	Aug.	1.18	Nov	6.0	89	144	113	108	nw.
Lakewood	Ocean	54	27	54.6	96	June 20†	10	do. 23	27	40.21	6.27	July	0.77	do.	2.0	100	184	58	123	nw.
Moorestown	Burlington	75	68	54.8	98	Aug. 3	13	do. 15†	68	39.29	6.51	do.	1.03	do.	5.1	100	166	60	139	nw.
Northfield	Atlantic	25	......	......	......	....	......	....	24	29.92	5.65	Aug.	0.42	do.	4.2	91	......	......	......	......
Pemberton	Burlington	55	1	56.0	98	Aug. 3	14	Jan. 23†	1	36.26	7.68	do.	0.76	do.	3.6	100	169	64	132	w.
Pleasantville	Atlantic	11	8	......	99	Sep. 11	8	Feb, 1	33	34.80	6.05	Aug.	0.54	Nov.	......	110	229	53	81	s.
Runyon	Middlesex	18	7	53.5	102	July 1	4	Jan. 9†	8	37.14	5.70	June	0.86	Sept.	......	86	208	100	57	w.
Trenton	Mercer	190	59	55.4	96	do. 28	13	Feb. 11	59	36.26	6.39	Aug.	0.94	Nov.	2.9	113	119	109	137	nw.
Trenton No. 2	Mercer	105	......	......	......	....	......	....	3	40.78	6.88	do.	0.78	do.	6.7	114	......	......	......	......
Tuckerton	Ocean	23	33	56.4	101	July 28	8	Feb. 11	38	30.78	7.25	do.	0.59	do.	0.3	91	191	29	145	nw
Philadelphia, Pa.	....	117	60	58.1	98	July 1	16	Jan. 15	60	39.28	7.99	July	1.00	Nov.	3.2	107	109	119	137	sw.
Means and extremes	......	......	......	55.6	103	July 1	4	Jan. 9†	......	36.35	9.61	Aug.	0.42	Nov.	3.3	98	175	74	116	nw
The Sea Coast.																				
Asbury Park	Monmouth	22	41	......	97	Sept. 11	......	....	42	30.69	4.70	Aug.	0.88	Nov.	0.5	87	246	70	49	nw.
Atlantic City	Atlantic	16	58	55.8	94	do. 11	16	Jan. 16	58	31.18	7.21	do.	0.61	do.	2.2	99	132	115	118	w.
Cape May City	Cape May	17	47	56.1	93	July 15†	18	do. 15	47	31.64	6.97	do.	0.53	do.	7.3	105	103	140	122	nw.
Long Branch	Monmouth	25	23	54.2	96	Sept. 11	12	do. 15†	23	36.36	6.27	do.	0.45	do.	4.1	116	148	90	127	nw.
Sandy Hook	Monmouth	22	33	55.0	96	Aug. 7	14	do. 15	33	31.60	5.26	do.	0.77	do.	4.4	116	127	108	130	sw.
Means and extremes	......	......	......	55.3	97	Sept. 11	12	Jan. 15†	......	32.29	7.21	Aug.	0.45	Nov.	3.7	105	151	105	109	nw.
For the State	......	......	......	54.4	102	July 1	−9	Feb. 11	......	37.07	9.61	Aug.	1.19	Nov.	8.6	106	169	82	114	nw.

† Also on other dates.

Monthly and Annual Precipitation for the Year 1931, with Departures from the Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	1.68	-1.86	2.24	-1.60	3.07	-0.78	2.14	-1.52	3.27	-0.56	4.54	+0.54	5.48	+0.50	2.75	-1.86	1.50	-2.27	2.28	-1.39	0.93	-2.31	2.32	-1.75	32.20	-14.86
harlotteburg	2.25	-1.30	2.42	-1.60	4.55	+0.35	4.59	+0.27	5.82	+1.62	7.33	+3.21	4.41	-0.42	3.62	-1.00	1.61	-2.81	2.22	-2.25	1.19	-2.33	2.50	-1.83	42.51	-8.09
ulvers Lake	2.21	-0.97	2.06	-1.00	3.15	-0.32	2.46	-1.36	3.50	-0.13	5.62	+1.01	5.10	+0.53	2.97	-1.45	2.70	-1.84	1.67	-2.51	0.84	-1.96	1.87	-1.79	34.15	-11.79
over	2.07	-2.32	2.59	-1.44	4.12	+0.13	3.60	-0.16	6.33	+2.39	5.11	+1.08	6.96	+1.69	4.16	-0.60	2.51	-1.58	3.37	-0.70	0.91	-2.73	2.59	-1.71	44.32	-5.95
ayton	1.85	-1.04	2.19	-0.55	2.60	-0.77	3.19	-0.42	4.69	+1.44	4.92	+1.13	7.37	+3.11	5.01	+1.11	3.07	-0.85	2.14	-1.48	1.06	-1.43	2.03	-1.91	40.12	-1.66
ong Valley	1.73	......	2.01	......	3.56	......	2.26	......	5.85	......	4.72	......	8.43	......	3.51	......	1.81	......	1.82	......	*0.79	......	*2.50	......	38.99	......
ewton	1.37	-2.24	2.10	-1.46	2.83	-0.74	2.87	-0.50	5.47	+1.54	5.56	+1.58	6.32	+1.36	3.76	-0.66	2.69	-1.12	2.44	-1.19	1.12	-2.01	2.22	-1.49	38.75	-6.93
hillipsburg	1.85	-1.75	1.78	-1.86	2.65	-0.89	1.53	-1.73	3.27	-0.59	4.73	+1.10	6.56	+1.71	2.26	-2.36	2.14	-1.52	2.62	-0.94	0.78	-2.42	2.10	-1.64	32.27	-12.89
ussex	1.44	-2.04	2.08	-1.30	3.07	-0.52	2.99	+0.45	3.83	+0.11	5.99	+2.31	6.26	+1.86	2.41	-1.85	3.15	-0.75	1.89	-1.55	1.19	-2.06	2.19	-1.39	36.49	-6.73
The Red Sandstone Plain.																										
ayonne	4.35	+0.46	3.07	-0.91	4.01	+0.01	2.23	-2.16	4.26	+0.30	4.93	+1.15	5.14	+0.53	2.71	-2.35	1.36	-2.17	4.69	+0.02	0.94	-2.33	2.49	-1.89	40.18	-9.34
oonton	2.02	-1.81	2.03	-1.94	3.44	-0.50	3.02	-0.97	4.81	+0.75	7.42	+3.75	4.43	-0.47	3.80	-1.28	2.82	-1.31	2.28	-1.63	0.66	-2.91	2.54	-1.44	39.27	-9.76
anoe Brook	2.08	......	2.58	......	4.22	......	2.79	......	3.83	......	6.28	......	4.46	......	4.50	......	2.21	......	2.72	......	0.53	......	2.44	......	38.64	......
hatham	2.57	-1.12	3.42	-0.01	6.06	+2.32	3.65	+0.45	5.02	+1.52	6.84	+2.78	5.67	+1.23	5.84	+1.43	2.89	-1.40	3.19	-1.02	0.45	-2.45	3.24	-0.93	48.84	+2.80
lizabeth	2.59	-1.45	2.66	-1.51	4.25	+0.03	2.68	-1.00	3.46	-0.36	4.92	+1.30	3.28	-1.88	4.03	-0.26	1.95	-1.82	2.67	-1.22	0.66	-2.59	2.04	-1.92	35.19	-12.68
lemington	1.87	-1.82	2.43	-1.11	3.24	-0.65	2.21	-1.31	4.48	+0.46	4.86	+1.02	4.81	-0.41	4.29	-0.42	2.83	-1.07	2.70	-0.96	0.78	-2.34	2.35	-1.41	36.85	-10.02
ersey City	2.45	-1.05	2.54	-1.18	4.79	+0.64	3.07	-1.09	3.79	+0.21	3.85	+0.35	4.54	+0.10	3.21	-1.32	1.17	-2.18	2.92	-1.76	0.67	-2.52	2.26	-1.67	35.26	-11.47
ambertville	1.96	-1.69	2.53	-0.95	3.53	-0.50	2.35	-1.23	3.72	-0.30	6.74	+2.83	7.55	+2.73	4.64	-0.02	1.76	-2.13	1.84	-1.60	1.04	-2.17	2.34	-1.53	39.88	-6.56
ittle Falls	2.25	-1.45	2.42	-1.05	3.97	+0.38	4.61	+0.49	4.87	+1.08	6.67	+3.15	2.43	-1.96	3.40	-1.00	2.75	-0.83	3.29	-1.22	0.76	-2.14	2.28	-1.81	39.70	-4.40
ew Brunswick	2.24	-1.55	2.37	-1.25	3.49	-0.32	2.37	-1.37	3.24	-0.65	4.60	+0.84	5.65	+0.61	5.24	+0.09	1.16	-2.41	2.54	-1.04	0.72	-2.76	2.15	-1.52	35.77	-11.36
ew Milford	1.83	......	2.83	......	3.60	......	4.48	......	4.32	......	4.51	......	3.37	......	4.09	......	2.48	......	3.18	......	0.66	......	2.88	......	38.23	......
aterson	2.40	-1.45	......	......	3.92	-0.46	4.82	+1.26	5.71	+1.27	4.65	-0.37	......	......	......	......	......	......	......	......	......	......	......	......	......	......
ainfield	2.16	-1.86	2.24	-1.72	4.50	+0.23	2.78	-1.12	5.21	+1.29	4.36	+0.62	5.75	-0.08	4.35	-0.86	2.73	-1.64	3.50	-0.65	0.82	-2.55	1.87	-2.19	40.27	-10.53
idgefield	1.91	......	2.46	......	4.26	......	3.95	......	3.88	......	3.79	......	4.01	......	4.10	......	2.02	......	3.58	......	0.66	......	2.48	......	37.10	......
omerville	1.91	-1.81	2.48	-1.30	3.41	-0.55	2.31	-1.18	3.79	-0.06	5.96	+2.22	4.70	-0.41	3.47	-1.37	2.17	-1.48	3.87	+0.43	0.86	-2.18	2.23	-1.62	37.16	-9.31
outh Orange	2.21	-1.82	2.59	-1.34	4.35	+0.49	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
erona	2.42	......	2.82	......	4.83	......	3.57	......	5.48	......	4.91	......	4.00	......	3.21	......	2.09	......	2.65	......	1.02	......	2.46	......	39.46	......
oodcliff Lake	2.12	......	2.81	......	4.09	......	5.17	......	4.12	......	4.82	......	2.18	......	3.39	......	1.58	......	2.67	......	0.94	......	2.75	......	36.64	......
ew York, N. Y.	2.43	-1.23	2.44	-1.38	4.74	+1.10	3.30	+0.07	3.93	+0.69	4.00	+0.67	4.55	+0.31	3.26	-1.07	1.15	-2.24	2.87	-0.66	0.61	-2.35	2.22	-1.40	35.50	-7.49
The Southern Interior.																										
elleplain	2.03	-1.50	1.18	-2.41	5.44	+1.74	1.96	-1.69	1.87	-1.95	2.90	-0.32	1.80	-2.31	7.72	+3.42	2.00	-1.39	2.23	-1.19	0.82	-1.79	2.55	-1.40	32.50	-10.79
idgeton	2.00	-1.52	1.88	-1.94	6.01	+1.83	2.26	-1.26	2.83	-1.01	2.18	-1.55	2.55	-1.94	9.61	+5.02	1.58	-1.73	2.78	-0.81	0.82	-1.98	1.81	-2.01	36.31	-8.90
urlington	2.68	-0.72	2.17	-1.33	4.51	+0.80	2.86	-0.84	4.01	-0.20	6.27	+2.39	6.28	+1.54	6.69	+1.24	1.07	-2.44	3.38	-0.27	1.02	-2.09	1.94	-2.38	42.88	-4.30
ayton	2.14	-1.33	0.94	-2.64	2.08	+0.50	3.32	-0.16	3.34	+0.01	4.18	+0.51	2.79	-2.06	7.17	+2.25	1.84	-1.60	3.39	+0.06	*0.85	-1.99	*1.88	-2.08	35.92	-8.53
reehold	......	......	......	......	......	......	......	......	......	......	......	......	......	......	5.54	+0.83	1.51	-2.78	2.38	-1.14	1.17	-2.85	1.87	-1.85	......	......
ammonton	2.15	-1.64	1.82	-1.59	4.43	+0.84	2.45	-1.47	1.62	-2.66	3.49	-0.03	1.93	-2.78	7.18	+3.20	1.67	-1.52	4.07	+0.52	0.69	-2.63	2.10	-1.50	33.60	-11.26
ghtstown	2.22	-1.05	2.01	-1.59	4.41	+0.37	2.14	-1.77	......	......	......	......	......	......	......	......	......	......	......	......	......	......	1.81	-1.88	......	......
dian Mills	2.29	-1.53	2.15	-1.30	5.16	+1.13	2.83	-0.60	3.48	+0.24	4.71	+0.58	1.85	-2.81	7.36	+1.43	1.63	-2.28	3.63	+0.19	1.18	-1.90	2.31	-2.09	38.58	-8.94
kewood	1.99	-1.69	2.35	-1.22	4.83	+0.85	3.06	-0.61	2.91	-0.49	4.89	+1.18	6.27	+1.42	5.46	-0.59	1.63	-1.16	4.03	+0.44	0.77	-1.69	2.02	-2.62	40.21	-6.18
oorestown	2.11	-1.35	1.62	-1.86	3.44	-0.32	2.40	-0.89	4.11	+0.09	5.94	+2.22	6.51	+1.83	6.13	+1.24	1.72	-1.91	2.56	-1.01	1.03	-2.22	1.72	-1.92	39.29	-6.10
orthfield	1.96	-1.57	1.17	-1.62	5.02	+1.53	2.23	-1.23	1.83	-1.64	2.43	-1.24	2.59	-1.01	5.65	+1.30	2.03	-0.47	2.10	-0.68	0.42	-1.96	2.49	-1.63	29.92	-10.22
mberton	1.85	......	1.55	......	3.59	......	2.35	......	3.65	......	6.62	......	2.00	......	7.68	......	1.18	......	3.46	......	0.76	......	1.57	......	36.26	......
easantville	2.29	-0.87	1.37	-1.44	5.60	+2.13	2.33	-1.02	1.92	-1.34	3.17	-0.76	3.26	-0.72	6.05	+1.12	2.56	-0.56	2.69	-0.75	0.54	-2.18	3.02	-1.22	34.80	-7.61
nyon	2.34	......	2.59	......	3.84	......	3.03	......	3.45	......	5.70	......	3.80	......	4.78	......	0.86	......	3.70	......	1.04	......	2.01	......	37.14	......
enton	2.15	-1.16	2.08	-1.19	3.24	-0.16	2.07	-0.87	4.00	+0.92	4.28	+1.19	5.47	+1.53	6.39	+1.64	1.06	-2.34	2.22	-0.56	0.94	-1.79	2.36	-0.99	36.26	-3.78
enton No. 2	2.42	......	2.26	......	4.01	......	2.50	......	4.32	......	5.41	......	6.24	......	6.88	......	0.99	......	2.58	......	0.78	......	2.39	......	40.78	......
ckerton	1.80	-1.83	1.04	-2.62	5.18	+0.93	2.41	-1.33	0.77	-2.97	2.54	-1.29	2.45	-1.43	7.25	+1.71	2.55	-0.51	1.70	-1.83	0.59	-2.49	2.50	-2.01	30.78	-15.67
iladelphia, Pa.	2.17	-1.13	1.92	-1.40	3.97	+0.58	2.05	-1.00	4.44	+1.18	3.75	+0.51	7.99	+3.84	6.00	+1.38	1.60	-1.54	2.61	-0.20	1.00	-1.70	1.78	-1.65	39.28	-1.13
The Sea Coast.																										
bury Park	2.28	-1.29	3.18	-0.32	3.14	-1.09	2.62	-1.07	2.51	-1.07	4.41	+0.79	1.78	-2.76	4.70	-0.36	1.24	-1.75	2.22	-1.49	0.88	-2.04	1.73	-2.12	30.69	-14.57
lantic City	2.06	-1.43	1.12	+2.24	5.19	+1.59	2.12	-0.87	1.43	-1.62	2.54	-0.50	1.67	-2.26	7.21	+2.72	2.55	-0.10	2.11	-1.09	0.61	-2.21	2.57	-1.37	31.18	-9.28
pe May City	1.71	-1.66	0.81	-2.48	5.92	+2.19	2.23	-0.76	2.76	-0.23	2.50	-0.54	0.80	-2.98	6.97	+2.71	3.13	+0.13	1.94	-1.36	0.53	-2.69	2.34	-1.44	31.64	-9.11
ng Branch	3.01	-1.17	2.36	-1.55	4.64	+0.30	2.65	-1.90	3.55	-0.21	3.84	+0.04	2.05	-2.87	6.27	+0.14	1.43	-1.63	3.34	-0.71	0.45	-3.07	2.77	-1.97	36.36	-14.60
ndy Hook	2.27	-1.69	1.85	-1.90	3.94	-0.10	2.38	-1.24	4.03	+0.31	3.66	-0.12	2.44	-2.65	5.26	+0.28	0.97	-2.46	2.41	-1.37	0.77	-2.48	1.62	-2.42	31.60	-15.87

* Interpolated from surrounding stations.

Monthly and Annual Mean Temperatures for the Year 1931, with Departures from the Normal

Stations.	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	[a]29.2	+1.9	[c]33.4	+6.3	[c]38.5	+0.4	[d]50.3	+0.5	[a]62.5	+1.8	[d]71.0	+2.2	77.2	+4.0	[a]73.4	+2.4	[c]71.3	+6.6	57.8	+4.0	.....	.....	[b]37.1	+6.5	.....	.....
Charlotteburg	28.4	+1.5	30.1	+4.6	37.2	+1.4	47.4	+0.6	59.2	+1.7	66.4	+1.6	73.4	+3.4	70.2	+2.3	67.8	+5.9	56.0	+4.4	48.0	+7.9	36.3	+6.5	51.7	+3.5
Dover	[b]28.0	+1.4	30.6	+4.4	37.4	+2.2	48.3	+0.9	59.0	+0.4	67.5	+0.8	74.1	+2.7	70.4	+1.3	67.2	+5.0	54.7	+3.4	48.8	+8.7	36.9	+7.0	51.9	+3.2
Layton	24.8	+0.1	27.8	+4.2	35.6	0.0	46.4	−0.8	57.9	−0.1	67.9	+2.4	73.9	+3.0	70.4	+2.0	66.9	+4.6	52.0	+0.5	43.6	+4.8	31.0	+3.6	49.8	+2.0
Long Valley	28.0	.....	30.7	.....	[b]37.2	.....	48.4	.....	59.4	.....	[a]66.9	.....	.....	.....	.....	.....	68.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newton	27.8	+2.1	29.4	+2.9	[a]36.7	+1.2	48.9	+0.9	60.2	+0.7	67.1	−0.9	74.2	+1.7	71.0	+0.6	[c]68.4	+4.9	57.0	+4.3	48.2	+7.7	[a]34.6	+4.5	52.0	+2.6
Phillipsburg	30.1	+2.0	32.4	+4.5	39.2	+1.1	50.4	+0.5	61.2	−0.1	70.2	+0.9	77.0	+2.9	73.1	+1.3	70.1	+4.9	56.6	+2.7	48.8	+7.6	37.2	+5.9	53.9	+2.8
Sussex	[a]26.0	−0.6	28.3	+2.9	[a]37.5	+1.2	48.6	0.0	[a]59.8	−0.1	68.1	+1.3	[d]74.8	+2.7	[b]71.4	+1.9	[a]68.0	+3.8	55.5	+2.3	[a]46.8	+5.7	35.4	+5.5	51.8	+2.2
The Red Sandstone Plain.																										
Bayonne	34.2	+3.5	34.6	+5.2	41.6	+2.1	50.8	+1.3	61.0	+0.7	69.1	+0.7	77.0	+3.0	75.2	+3.0	.....	.....	62.1	+5.9	53.7	+10.0	40.4	+7.4	.....	.....
Boonton	.....	.....	31.1	.....	38.8	.....	49.7	.....	59.2	.....	68.0	.....	74.8	.....	71.5	.....	68.3	.....	55.8	.....	49.0	.....	38.0	.....	.....	.....
Canoe Brook	27.8	.....	31.0	.....	37.4	.....	47.8	.....	58.2	.....	67.4	.....	74.5	.....	71.4	.....	68.2	.....	56.7	.....	48.3	.....	36.6	.....	52.1	.....
Elizabeth	[a]32.6	+2.4	34.5	+4.0	41.1	+2.3	51.8	+1.0	62.7	+0.7	71.8	+1.3	[a]78.0	+2.7	75.0	+1.6	71.6	+4.9	[a]60.0	+4.6	51.3	+7.8	40.0	+6.7	55.9	+3.3
Flemington	32.0	+2.2	34.3	+5.5	40.4	+0.3	51.1	+0.7	62.0	+0.7	73.2	+4.0	77.4	+2.8	74.3	+1.8	71.4	+5.1	59.4	+3.4	50.6	+7.7	39.5	+7.5	65.5	+3.5
Jersey City	33.3	+1.1	34.1	+3.5	40.5	+1.3	49.2	−0.8	61.6	0.0	70.0	−0.9	77.7	+1.6	75.2	+1.1	72.2	+5.0	60.6	+4.3	51.7	+7.7	40.6	+6.5	55.6	+2.5
Lambertville	30.1	.....	32.1	.....	38.2	.....	49.6	.....	61.1	.....	69.8	.....	76.7	.....	73.5	.....	70.4	.....	59.9	.....	50.2	.....	38.4	.....	54.2	.....
Little Falls	30.4	+2.4	32.8	+3.2	39.7	+1.7	50.3	+0.4	60.8	+1.1	69.6	+1.6	76.4	+2.6	73.6	+0.4	70.5	+6.4	58.1	+3.2	50.4	+8.2	38.4	+6.9	54.2	+3.2
New Brunswick	32.2	+2.0	33.8	+3.0	39.6	+0.8	50.7	+1.1	61.4	+1.0	70.4	+1.3	76.8	+2.8	74.0	+1.9	70.9	+5.3	58.4	+3.6	50.4	+7.0	39.8	+6.6	54.9	+3.0
Paterson	32.8	+3.2	.....	.....	41.1	+2.3	50.8	+0.3	61.2	−0.3	71.9	−2.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plainfield	31.6	+1.6	33.2	+4.5	39.4	+0.6	49.6	0.0	60.4	+0.2	68.8	+0.2	76.3	+2.3	73.0	+1.2	70.1	+4.5	58.4	+4.2	49.8	+7.3	39.1	+6.4	54.1	+2.8
Ridgefield	29.9	.....	31.2	.....	39.2	.....	50.2	.....	60.0	.....	69.5	.....	76.0		73.2	.....	69.8	.....	58.1	.....	49.8	.....	38.2	.....	53.8	.....
Somerville	31.4	+2.6	33.6	+4.7	39.4	+1.2	50.0	+0.5	60.8	0.0	69.4	+0.3	77.1	+3.0	[b]74.1	+1.7	69.8	+3.8	57.8	+3.5	49.8	+7.4	[d]37.6	+5.4	54.2	+2.8
South Orange	[c]31.0	+2.1	[f]34.6	+5.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Verona	29.4	.....	30.6	.....	37.6	.....	48.8	.....	59.0	.....	67.3	.....	74.2	.....	74.1	.....	68.6	.....	56.9	.....	48.7	.....	37.2	.....	52.7	.....
New York, N. Y.	33.2	+2.3	34.1	+2.8	40.5	+2.8	50.4	+1.0	60.4	−0.2	69.4	+0.6	76.5	+2.7	74.4	+1.3	71.2	+4.4	60.4	+4.1	51.5	+7.3	40.6	+5.6	55.2	+2.9
The Southern Interior.																										
Belleplain	32.8	−0.2	34.8	+3.3	[a]38.5	−2.6	48.4	−2.2	59.2	−1.9	67.0	−1.7	74.2	+0.4	72.0	−0.6	[c]71.2	+4.7	.....	.....	[g]52.0	+7.5	42.1	+7.0	.....	.....
Bridgeton	33.8	+0.1	36.3	+2.6	40.7	−1.6	51.2	−1.5	62.0	−2.0	71.4	−0.7	78.9	+2.2	75.2	+0.2	73.2	+5.0	59.0	+1.6	51.4	+5.8	42.4	+6.2	56.5	+1.5
Burlington	35.4	+3.1	35.6	+4.3	40.8	+0.4	62.4	+0.6	63.2	+1.3	72.5	+2.8	79.4	+4.4	75.7	+1.5	73.0	+6.2	60.6	+2.4	52.5	+8.1	42.8	+9.0	57.0	+3.7
Clayton	33.2	+1.1	35.2	+4.5	39.2	−2.5	50.4	−0.8	61.5	−0.2	70.0	+0.5	77.8	+2.8	74.2	+1.1	72.0	+5.2	58.4	+1.6	.....	.....	.....	.....	.....	.....
Freehold	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58.6	.....	50.8	.....	41.0	.....	.....	.....
Hammonton	34.2	.....	35.6	.....	40.2	.....	51.0	.....	61.6	.....	70.4	.....	78.0	.....	74.6	.....	71.8	.....	59.0	.....	51.0	.....	41.7	.....	55.8	.....
Hightstown	31.4	+1.5	33.0	+3.6	38.9	−1.5	50.2	−0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51.1	+7.2	41.8	+9.2	.....	.....
Imlaystown	[c]32.0	+0.9	[d]33.0	+2.6	[b]39.7	+0.6	.....	.....	.....	.....	69.4	+1.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian Mills	33.0	+1.1	35.1	+3.3	40.0	−0.5	51.0	+0.7	62.0	−0.1	69.9	−0.1	77.2	+2.5	73.7	+1.1	71.6	+5.5	59.0	+3.5	51.5	+8.6	41.8	+8.0	55.5	+2.8
Lakewood	32.6	+1.3	34.3	+4.6	39.2	−0.4	49.6	+0.2	60.7	+0.5	69.4	+1.9	76.2	+3.4	73.8	+2.7	70.3	+5.7	56.8	+1.7	50.1	+7.3	40.8	+7.3	54.6	+3.0
Moorestown	32.4	+1.7	34.2	+2.9	39.8	+0.6	60.1	−0.3	61.0	−0.3	69.9	−0.1	77.2	+2.5	73.4	+0.8	71.3	+5.3	57.8	+3.1	50.0	+6.8	39.2	+5.7	54.8	+2.4
Pemberton	33.0	.....	35.3	.....	40.4	.....	51.6	.....	62.5	.....	71.2	.....	78.1	.....	75.5	.....	72.3	.....	58.5	.....	51.4	.....	41.6	.....	56.0	.....
Pleasantville	33.2	.....	.....	.....	39.0	.....	49.3	.....	58.8	.....	[a]68.2	.....	77.2	.....	74.0	.....	[a]71.9	.....	58.4	.....	50.6	.....	41.2	.....	.....	.....
Runyon	30.2	.....	32.7	.....	38.9	.....	49.2	.....	61.4	.....	69.7	.....	75.8	.....	74.2	.....	69.2	.....	56.4	.....	47.4	.....	37.4	.....	53.5	.....
Trenton	33.2	+2.7	34.4	+3.7	39.7	+0.6	50.6	+0.8	61.8	+0.7	70.4	+0.9	77.5	+3.0	74.0	+1.0	71.4	+4.5	59.6	+4.0	51.1	+6.7	40.5	+6.1	55.4	+2.9
Tuckerton	35.6	+3.0	36.4	+5.6	40.6	+0.6	48.5	−0.8	58.8	−1.1	69.2	+0.8	79.0	+4.9	74.8	+2.1	71.2	+5.0	62.0	+5.9	54.5	+10.4	45.8	+11.4	56.4	+4.0
Philadelphia, Pa.	36.2	+3.6	37.4	+3.5	42.3	+1.5	53.2	+1.1	64.2	+1.3	72.9	+1.5	79.8	+3.6	76.3	+1.5	74.1	+6.1	62.6	+4.8	54.0	+8.3	44.2	+7.9	58.1	+3.7
The Sea Coast.																										
Asbury Park	.....	.....	35.2	+3.8	40.7	+1.7	49.0	+0.5	58.2	−0.6	67.8	+0.4	76.1	+3.7	74.6	+2.8	72.2	+5.4	60.5	+4.7	51.7	+6.9	43.0	+8.0	.....	.....
Atlantic City	36.1	+3.6	36.5	+2.9	40.0	+1.4	49.3	+1.5	58.0	−0.1	68.4	+1.8	76.7	+4.6	74.5	+2.0	72.3	+5.5	61.5	+4.6	52.9	+7.3	43.8	+7.4	55.8	+3.5
Cape May City	36.5	+2.4	36.4	+2.3	40.6	−0.3	49.4	+1.0	59.2	+0.6	68.5	+0.8	76.9	+3.5	74.0	+0.6	72.4	+3.4	61.6	+2.0	53.2	+5.8	44.4	+6.4	56.1	+2.4
Long Branch	31.9	+0.3	33.9	+3.5	39.2	+0.7	50.4	+2.3	57.2	−1.0	69.2	+3.0	77.6	+5.5	73.4	+2.4	69.8	+3.9	57.3	+1.0	50.8	+6.6	39.6	+5.5	54.2	+2.6
Sandy Hook	32.9	+2.1	31.2	+3.6	39.6	+2.6	49.6	+2.6	58.5	0.0	68.8	+1.0	76.6	+2.7	74.3	+1.5	71.9	+4.8	60.6	+3.6	51.4	+6.8	41.0	+6.6	55.0	+3.2

Reference letters, as a, b, c., in table indicate number of days missing; for example, b represents 2 days.

THE WEATHER BY MONTHS.

JANUARY: Fair and mild, as a whole; markedly deficient in snowfall and blustery weather. FEBRUARY: Relatively mild weather continued, and with precipitation less than two-thirds of normal. Snowfall light. MARCH: Nearly normal temperature conditions; dry conditions somewhat alleviated by above-normal precipitation. Not much snow. Considerable damage by wind along the north Jersey shore on the 8th. APRIL: Temperature averaged nearly normal with the last killing frosts of Spring coming at about the usual dates. Dry weather returned and forest fires were numerous from the 13th to 20th. MAY: Nearly normal temperature but there was wide variation in the amount of rainfall received. Destructive hail storms in Burlington County on the 10th. JUNE: Abundant precipitation, except in the more extreme southern section which is suffering acutely from continued drought. Temperature continued above normal. JULY: Second warmest on record. Sea Coast section very dry while rainfall average along the western border of State was over seven inches contrasted with about one inch along the coast. AUGUST: Warmer than normal. Copious rains in southern portion broke the drought there. Three lives were lost at Atlantic City on the 19th by high tidal wave. SEPTEMBER: Warmest on record. Rainfall only about two-thirds of normal. OCTOBER: One of the warmest on record. First killing frosts of Autumn considerably later than usual. Rainfall continued deficient. NOVEMBER: The warmest and second driest November on record. Rainfall only one-fourth of normal. DECEMBER: The usual warmth and dryness continued.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.

TRENTON, N. J.

Vol. XXXVII. January, 1932. No. 1

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month was the warmest January in the past 48 years which is the period of the record. The average of 42.4 degrees compares with the record of the previous warmest January, in 1890, when the mean was 41.3 degrees. Only the last day of the month was below the normal, while on a number of days the average was from 20 to 30 degrees above normal. The temperature reached its highest point about the middle of the month, mostly the 14th and 15th, and was largely in the seventies. The lowest points were generally near 20 and were registered mostly on the 26th and 31st.

Practically the entire amount of the precipitation, which was mostly rain, was confined to the first and third decades, and the State average for the month was 117% of the normal. The distribution over the State was quite uniform. The number of rainy and cloudy days was unusually large, the rainy days nearly equalling the record while the number of cloudy days set a new record. The snowfall was close to the smallest on record for January. There were several years having less but the difference amounts to only a few tenths of an inch in the State averages. The average fall over the southern half was less than an nch, while over the northern portion it was about two inches.

The sunshine was quite deficient. There was no wind damage reported. Water supplies in general continue below normal.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 42.4°, which was 12.4° above normal. The highest temperature was 76° at Hammonton and Asbury Park on the 14th and 15th, and the lowest, 18°, at five stations on various dates. The greatest daily range of temperature was 42° at Hightstown on the 15th. The highest mouthly mean temperature was 47.5° at Tuckerton, and the lowest, 35.5° at Layton.

The temperature departure from the normal for the year, 1932, o date, by sections, is: The Highlands, +12.1°; Red Sandstone Plain, +12.4°; Southern Interior, +12.8°; Sea Coast, +11.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 4.50 inches, which was 0.82 inch above normal. The average total snowfall at 20 selected stations was 1.5 inches. The greatest monthly precipitation was 6.09 inches at Tuckerton, and the least, 2.79 inches at Newton. The greatest amount of precipitation in any 24 consecutive hours was 1.78 inches at Atlantic City on the 9-10th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 3 more than normal.

The precipitation accumulated departure from the normal for the year, 1932, to date, by sections, is: The Highlands. +0.46 inch; Red Sandstone Plain, +0.66 inch; Southern Interior, +1.26 inches; Sea Coast, +0.75 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 14 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 54 miles per hour from the east at Atlantic City on the 1st.

MISCELLANEOUS.

The per cent of possible sunshine was 32, or 18 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.14 inches, or 0.03 inch above normal. The highest reading was 30.64 inches at Long Branch and Ridgefield on the 16th, and the lowest 29.48 inches at Sandy Hook on the 30th.

The mean stage of the Delaware River at Phillipsburg was 4.0 feet, and the highest 6.5 feet on the 24th. The mean stage at Trenton was 2.3 feet, and the highest 4.3 feet on the 9th. The normal stage at Trenton is 3.5 feet.

Sleet was quite general in the State, occurring on the following dates: 1, 2, 7, 8, 9, 10, 16, 17 and 29th. Dense fog was noted on the 1st, 2d, 14th. 17th, 23d, 24th, 29th and 30th at various points along the sea coast. In the interior of the State it occurred on the following dates: 13, 14, 15, 23, 28, 29 and 30.

COMPARATIVE DATA FOR JANUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	30.8	67	0	4.08	5.41	3.33	......	......	......	......	......
1886	27.3	60	−10	4.47	5.59	3.08	......	......	......	......	......
1887	28.4	67	−6	3.86	6.65	2.00	......	......	......	12	10
1888	25.4	59	−12	4.77	6.74	2.80	......	......	......	12	9
1889	36.2	60	8	5.68	8.78	3.84	......	......	......	9	9
1890	41.3	**78**	12	2.29	3.22	1.05	......	......	......	11	10
1891	34.2	59	10	**6.57**	**10.55**	4.41	......	10	11	10	10
1892	29.9	67	−6	5.13	7.05	2.50	......	10	9	12	10
1893	21.6	*54*	−21	3.04	4.56	1.87	......	10	10	11	9
1894	34.2	61	−4	2.34	3.80	1.18	......	10	8	13	11
1895	28.1	64	−4	4.66	5.80	2.48	9.7	10	10	11	11
1896	28.6	61	−7	1.66	2.81	**0.68**	......	12	10	9	5
1897	29.0	64	−6	2.80	4.21	1.70	11.5	11	8	12	9
1898	32.6	64	−10	4.20	5.90	2.79	9.7	9	11	11	11
1899	30.1	60	−21	4.01	5.73	2.40	6.0	13	8	10	11
1900	32.4	64	−5	3.85	5.50	2.37	2.6	11	11	9	10
1901	30.4	63	−6	2.52	4.00	1.35	5.4	11	11	9	9
1902	28.4	58	−5	3.28	4.35	2.52	8.6	12	9	10	10
1903	30.4	57	−5	3.90	5.04	2.31	6.4	10	10	11	10
1904	23.3	58	**−34**	3.09	4.67	1.34	15.6	13	7	11	10
1905	27.0	60	−16	4.18	7.13	2.68	21.3	12	9	10	9
1906	36.5	74	−5	2.85	3.86	2.08	3.1	11	9	11	11
1907	31.8	71	−19	3.50	5.80	1.93	10.3	8	9	14	14
1908	31.8	60	−6	3.74	5.22	2.29	9.9	12	11	8	9
1909	33.2	69	−12	3.18	4.13	2.18	7.5	8	9	14	12
1910	29.7	*54*	−15	5.04	6.65	3.66	13.3	8	8	15	15
1911	33.5	63	0	3.44	5.34	1.97	3.6	10	7	14	14
1912	22.3	58	−32	2.82	4.62	1.73	13.4	8	12	11	13
1913	35.9	68	10	3.58	4.71	2.63	*0.8*	11	7	13	14
1914	31.9	73	−12	3.85	6.15	1.95	2.4	9	8	14	9
1915	33.5	61	3	6.55	8.92	4.40	3.4	11	6	14	12
1916	35.1	74	−2	**1.50**	2.96	0.92	1.9	11	8	12	11
1917	31.4	58	0	3.26	4.52	2.35	5.4	10	8	13	13
1918	**20.3**	56	−16	4.14	6.14	2.78	18.9	12	8	11	11
1919	34.1	62	−7	3.51	4.44	2.24	1.3	14	7	10	8
1920	23.6	53	−10	2.60	3.53	1.61	6.6	11	7	13	11
1921	33.0	63	−5	2.63	3.49	1.78	2.7	13	8	10	9
1922	27.6	57	−11	2.62	4.13	1.08	11.1	15	6	10	8
1923	30.1	66	−14	5.22	7.26	3.41	16.6	9	7	15	12
1924	32.2	65	−6	4.48	5.69	2.88	1.4	15	8	8	8
1925	27.4	59	−20	4.43	8.73	2.54	**22.8**	12	6	13	10
1926	30.8	63	−9	2.61	4.04	1.63	2.4	11	8	12	9
1927	29.2	70	−12	2.22	3 32	1.19	7.9	11	7	13	11
1928	32.5	65	−15	2.26	3.97	1.37	8.3	15	8	8	8
1929	30.7	67	−4	3.49	5.03	1.92	1.6	13	7	11	10
1930	31.7	72	−14	2.92	4.03	1.80	5.9	10	6	15	10
1931	31.6	64	−5	2.16	4.35	1.37	1.6	16	7	8	5
1932	**42.4**	76	18	4.50	6.09	2.79	1.5	8	6	17	13
Normal	30.0	......	......	3.68	......	......	7.6	11	9	11	10
Extremes	......	78	−34	......	10.55	0.68	......	......	......	......	......

W. B. O. Philadelphia-2-25-32-830.

Climatological Data for January, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	40.4[1]	+13.1	68	14	23	31	30	4.16	+0.62	1.02	T.	11	11	5	15	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	38.9	+12.0	69	14	18	29†	35	4.35	+0.80	0.95	3.8	17	12	3	16	e.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	20	1†	....	3.49	+0.31	0.75	9.5	16	4	12	15	e.	Brice E. Riker.
Dover	Morris	600	48	38.8	+12.2	69	14	18	31	29	4.61	+0.22	1.54	1.0	11	5	10	16	......	William C. Harris
Layton	Sussex	480	31	35.5	+10.8	57	14	18	1	25	4.55	+1.66	0.71	2.0	16	4	5	22	ne.	A. M. Depue.
Long Valley	Morris	520	1	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	48	37.8	+12.1	70	14	17	31	32	2.79	−0.82	0.83	4.5	11	4	4	23	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	40.7	+12.6	68	13	20	31	28	3.74	+0.14	1.10	T.	13	11	3	17	......	Town Engineer.
Sussex	Sussex	442	37	38.3	+11.7	66	14	22	31	30	4.25	+0.77	0.75	4.0	16	8	5	18	n.	A. J. W. Mowatt
Means and extremes	......	......	....	38.6	+12.1	70	14	18	1†	35	3.99	+0.46	1.54	3.1	14	7	6	18	e.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	40.2	+12.9	71	15	22	1	40	4.28	+0.45	1.32	......	12	5	7	19	nw	John Kline.
Canoe Brook	Essex	173	2	40.4	......	70	14	21	29	37	4.61	......	1.12	......	10	7	9	15	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	5.05	+1.36	1.35	T.	11	8	13	10	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	43.2	+13.0	72	14	25	31	29	4.56	+0.52	0.99	0.4	15	10	5	16	nw.	Union County Park Com.
Flemington	Hunterdon	140	§46	42.0	+12.2	74	14	24	31	33	3.99	+0.30	0.72	T.	14	9	6	16	nw.	Hiram E. Deats.
Jersey City	Hudson	10	34	43.0	+10.8	68	13†	24	31	22	4.38	+0.88	0.85	1.3	17	7	8	16	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	41.9	+11.4	68	13†	23	31	34	4.34	+0.69	0.78	2.0	13	7	6	18	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	41.6	+13.6	72	14	23	1	38	4.27	+0.57	0.98	1.0	12	7	10	14	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	43.0	+12.8	71	14	25	31	32	4.45	+0.66	1.10	1.8	12	7	11	13	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	4.28	......	1.02	......	12	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Vincent A. Messineo.
Plainfield	Union	120	44	41.6	+11.6	70	13†	24	31	30	5.15	+1.13	1.53	0.8	11	6	6	19	n.	S. K .Pearson.
Ridgefield	Bergen	80	15	40.9	......	70	14	22	31	24	3.92	......	1.32	2.0	12	8	2	21	nw.	George P. Kirsten.
Somerville, near	Somerset	70	49	42.0	+13.2	73	14	24	31	34	3.76	+0.04	0.63	0.8	13	8	1	22	nw.	Julius Gerlich.
Verona	Essex	490	6	39.6	......	67	13†	20	20	30	5.08	......	1.19	3.5	14	4	7	20	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	5.00	......	1.03	......	15	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	62	42.8	+11.9	68	14	21	31	28	4.23	+0.57	1.21	1.0	16	6	4	21	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	41.6	+12.4	74	14	20	20	40	4.47	+0.66	1.53	1.2	13	7	7	17	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	45.0	+12.0	75	14†	18	26	33	3.86	+0.33	......	0	10	3	3	25	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	49	44.4	+10.7	74	15	25	26	31	5.33	+1.81	1.33	0	11	14	3	14	sw.	Bennett K. Matlack
Burlington	Burlington	12	§46	45.2	+12.9	75	14	26	26	32	4.84	+1.44	0.81	T.	14	11	4	16	w.	Public Service Power Co.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	43.5	......	71	14	25	31	33	5.15	+1.19	1.25	1.0	16	13	1	17	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	44.6	......	76	14†	20	31	36	4.88	+1.09	0.93	0.5	11	11	7	13	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	38	44.0	+14.1	73	14	18	31	42	3.44	+0.17	1.20	2.0	6	18	2	11	w.	S. Elwood Crowshaw.
Indian Mills‡‡	Burlington	76	43	44.8	+12.9	75	14†	21	26	35	5.11	+1.29	0.86	1.2	12	7	7	17	nw.	James M. Armstrong.
Lakewood	Ocean	54	28	44.4	+13.1	75	15	24	26	32	5.86	+2.18	1.75	0.1	13	9	4	18	sw.	R. W. Holman.
Moorestown	Burlington	......	69	42.8	+12.1	72	14	19	31	31	3.62	+0.16	0.89	1.0	11	7	7	17	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	4.84	+1.31	0.85	1.0	10	....	....	....	....	William L. Flick.
Pemberton	Burlington	55	....	44.8	......	73	15	26	26	32	4.10	......	0.79	0.5	11	8	3	20	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	44.4	......	76	15	21	26	34	5.25	+2.09	1.16	......	13	11	7	13	nw.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	8	41.7	......	72	14†	20	4	39	5.36	......	1.31	.....	10	10	14	7	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	43.4	+12.9	73	14	20	31	29	4.18	+0.87	1.40	0.5	13	4	6	21	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	...	4.66	......	1.44	0.9	12	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	47.5	+14.9	75	15	28	4	32	6.09	+2.46	1.20	0.2	14	14	0	17	ne.	John H. Brown.
Philadelphia, Pa	......	117	61	46.2	+13.6	73	14	23	31	28	4.69	+1.39	1.22	0.7	12	5	7	19	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	44.2	+12.8	76	14†	18	26	42	4.79	+1.26	1.75	0.6	12	10	5	16	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	44.6	+12.4	76	15	26	31	32	4.77	+1.20	0.87	1.0	14	18	5	8	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	45.3	+12.8	67	14	22	31	22	5.13	+1.64	1.78	1.8	11	5	8	18	w.	U. S. Weather Bureau.
Cape May	Cape May	17	48	45.2	+11.1	70	15	25	31	26	4.81	+1.44	1.51	0.7	10	2	14	15	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	42.1	+10.5	74	15	20	31	30	4.18	0.00	0.86	1.5	16	10	3	18	e.	Willlam D. Martin.
Sandy Hook	Monmouth	22	34	43.2	+12.4	66	14	23	31	24	3.43	−0.53	0.76	T.	16	4	5	22	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	44.1	+11.8	76	15	20	31	32	4.46	+0.75	1.78	1.0	13	8	7	16	w.	
For the State	......	......	....	42.4	+12.4	76	14†	18	1†	42	4.50	+0.82	1.78	1.5	13	8	6	17	w.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record. but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for January, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.65	.52	....	....	....	1.02	.50	.23	.20	....	....	T.	.12	....	T.	....	.03	....	....	....	....	....	.57	....	....	....	.30	....	.02	....	....	4.16
Charlotteburg	Passaic	.17	.95	.16	....	....	.75	.64	.15	.17	.07	....	.01	.01	....	....	....	....	....	....	....	.06	.22	.20	.02	....	....	.34	....	.09	.34	....	4.35
Culvers Lake	Delaware	.25	.55	.10	....	....	.75	.10	.13	.25	T.	....	T.	.10	....	....	....	.02	.01	....	....	.10	.15	.44	T.	T.	....	.20	....	.04	.30	....	3.49
Dover	Passaic	.50	.65	....	....	....	1.54	....	.30	....	.10	....	....	.05	....	....	....	....	....	....	....	.22	....	.34	....	....	....	.43	....	.12	.36	....	4.61
Layton	Delaware	*	1.05	.13	....	....	.71	.29	.26	.10	....	....	....	.24	....	....	....	.01	.06	....	....	.45	.18	.45	T.	....	....	.23	....	.05	.34	....	4.55
Long Valley	Morris	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Delaware	.15	.63	T.	T	....	.83	....	.34	.04	T.	....	T.	.03	....	T.	....	T.	T.	....	....	.32	.04	.33	T.	T.	....	....	....	.04	.04	....	2.79
Phillipsburg	...do	.47	.39	....	....	....	1.10	.39	.33	.12	.03	....	T	T.	....	T.	T.	.03	T.	....	....	.03	T	.31	T.	....	T.	.21	....	.13	.20	....	3.74
Sussex	Hudson	.16	.75	.08	....	....	.64	.23	.40	.32	....	....	.06	....	....	.06	....	....	....	....	....	.19	.34	.32	.09	....	....	.23	....	.07	.31	....	4.25
The Red Sandstone Plain.																																	
Boonton ‖	Passaic	T.	.68	.44	....	....	.26	1.32	....	.32	.03	....	....	T.	....	....	....	....	T.	....	....	....	.22	.05	.27	....	....	.39	....	....	.29	.01	4.28
Canoe Brook ‖	Essex	....	1.01	.46	....	....	.26	1.12	T.	.39	.36	....	....	....	....	....	....	....	T.	....	....	....	.13	T.	.28	....	....	.32	....	....	.28	T.	4.61
Chatham ‖	...do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Elizabeth	Coast	.22	.99	.14	....	....	.47	.88	.24	.30	.39	....	....	.03	....	T.	....	T.	.04	....	....	.06	.07	.26	....	....	....	.33	....	T.	.14	....	4.56
Flemington	Raritan	.34	.49	....	....	....	.72	.61	.23	.27	.22	....	T.	.02	....	....	....	T.	.04	....	....	.03	T.	.31	.02	....	....	.46	....	T.	.23	....	3.99
ersey City	Coast	.40	.85	.01	....	....	.55	.68	.25	.41	.45	....	T.	T.	T.	T.	T.	.01	.01	....	....	.10	.02	.26	.01	T.	....	.26	....	.02	.09	....	4.38
ambertville	Delaware	.50	.45	....	....	....	.70	.78	.30	.31	.27	....	T.	....	....	....	....	T.	....	....	....	.06	.01	.23	.02	....	....	.47	....	T.	.24	....	4.34
ittle Falls ‖	Passaic	T.	.98	.34	....	....	.25	.96	. .	.39	.28	....	....	T.	....	....	....	....	.01	....	....	....	.21	.05	.25	....	....	.28	....	....	.27	....	4.27
ew Brunswick	Raritan	.47	1.10	T.	....	....	.39	.78	.02	.35	.39	....	T.	T.	....	T.	....	....	....	....	....	.03	.01	.22	T.	....	....	.32	....	....	.07	....	4.45
ew Milford ‖	Hackensack	....	.72	.38	....	....	.21	1.02	....	.45	.27	....	....	....	....	....	....	....	.06	....	....	....	.28	.03	.29	....	....	.31	....	....	.26	....	4.28
aterson	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
lainfield	Raritan	1.17	.46	.07	....	....	*	1.53	....	.53	.38	....	T.	....	....	....	T.	.01	.02	....	....	*	*	.40	....	....	....	.18	T.	....	.40	....	5.15
idgefield**	Hackensack	T.	.98	.05	..	....	....	1.32	T.	.34	.32	....	T.	....	....	T.	T.	.02	....	....	....	.19	....	.33	..	....	....	.25	....	....	.12	....	3.92
omerville	Raritan	.42	.56	....	....	....	.50	.63	.27	.26	.32	....	....	....	....	....	....	....	.01	....	....	.03	T.	.22	.01	....	....	.31	....	....	.22	....	3.76
erona**	Passaic	.79	.89	T.	....	....	1.19	.13	.22	.38	.24	....	T.	.01	....	....	....	.02	....	....	....	.22	T.	.35	....	....	T.	.32	....	.13	.19	....	5.08
oodcliff Lake ‖	Hackensack	....	.66	.42	.05	....	.21	1.03	....	.49	.26	....	....	.02	....	....	....	....	.04	....	....	....	.51	.05	.35	....	....	.42	....	....	.44	.05	5.00
ew York, N. Y***	Coast	.60	.59	T.	....	....	1.05	.16	.29	.60	.19	....	T.	T.	T.	T	T.	.01	T.	....	....	.11	.01	.25	.01	T.	.02	.24	....	.06	.04	....	4.23
The Southern Interior.																																	
elleplain	Tuckahoe	*	.96	....	....	....	*	.09	*	*	2.04	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	....	.29	....	.28	.20	....	3.86
ridgeton	Coast	1.33	.09	T.	....	....	.43	.45	.83	.78	.55	....	....	....	....	....	....	....	....	....	....	....	T.	.03	....	....	....	.28	....	.38	.18	....	5.33
urlington	Delaware	.72	.35	....	....	....	.50	.81	.50	.42	.57	....	.01	T.	....	T.	....	T.	....	....	....	.08	....	.15	.04	....	....	.48	....	.10	.11	....	4.84
layton	...do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
reehold	Raritan	.32	1.25	.01	....	....	.40	.91	.50	.55	.50	....	.03	.01	....	....	....	.01	....	....	....	.04	.01	.16	....	....	....	.35	....	....	.10	....	5.15
ammonton	Mullica	.93	.23	....	....	....	.40	.46	.81	.88	.37	....	T.	T.	....	....	....	....	....	....	....	....	....	.05	....	....	....	.35	....	.29	.11	....	4.88
ightstown	Raritan	1.03	T.	....	....	....	1.20	....	.07	.65	....	....	T.	....	....	....	....	....	....	....	....	....	....	.11	....	....	....	.38	....	T.	T.	....	3.44
dian Mills	Mullica	.77	.25	T.	....	....	.48	.68	.86	.75	.12	....	.04	....	....	....	....	....	....	....	....	....	....	.14	....	....	....	.50	....	.36	.16	....	5.11
akewood	Metedeconk	.50	.60	T.	....	....	.40	.70	1.75	.76	.40	...	.04	T	....	T.	....	....	....	....	....	.07	T	.15	....	....	....	.30	....	.07	.12	....	5.86
oorestown ‖	Delaware	.74	T.	....	....	....	.17	.89	.18	.74	.02	....	.14	....	....	T	T.	....	....	....	....	....	T.	.08	....	....	....	.43	....	.14	.09	....	3.62
orthfield	Coast	.85	.32	....	....	....	.31	.45	.60	1.14	.49	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.27	....	.20	.21	....	4.84
emberton	....	.56	.13	T.	....	....	.32	.79	.70	.52	.33	....	T.	T	T.	T.	....	....	....	....	....	T.	....	.14	....	....	....	.37	....	.16	.08	....	4.10
easantville ‖	Coast	.21	1.13	....	....	....	.04	.93	.08	.93	1.16	....	....	.02	.02	....	....	....	.01	....	....	....	....	T.	T.	....	....	.32	....	....	.25	.15	5.04
nyon	Coast	1.00	.91	....	....	....	.38	.93	.35	.42	.66	....	....	....	....	....	....	....	....	....	....	....	....	.27	....	....	....	.41	....	....	.03	...	5.36
renton***	Delaware	.49	.28	T.	....	T.	1.14	.27	.45	.57	.21	...	T.	T.	....	T.	T.	....	....	....	....	.06	T.	.18	....	....	.03	.38	....	.05	.07	....	4.18
renton No. 2 ‖	...do	T.	.93	.14	....	....	.09	1.35	.01	.70	.60	....	....	....	....	....	T.	T.	....	....	....	....	.05	....	.21	....	....	.43	T.	....	.11	.04	4.66
ckerton	Coast	1.10	.40	.03	....	....	.10	.82	.30	1.20	1.10	....	.02	....	.02	....	....	....	....	....	....	....	....	....	....	.03	....	.08	....	.09	.80	....	6.09
ila., Pa***	Delaware	1.10	.12	T.	....	....	1.07	.17	.58	.60	.18	....	T.	T.	....	T.	....	T.	....	....	....	T	T.	.14	....	....	.05	.40	....	.19	.09	....	4.69
The Sea Coast.																																	
bury Park	Coast	.42	.59	T.	....	....	.42	.57	.78	.87	.62	....	.03	.02	....	T.	....	....	....	....	....	.05	.02	.14	....	....	....	.24	....	.04	T.	....	4.77
lantic City***	...do	.96	.03	T.	....	....	.54	.23	.80	1.27	.64	....	T.	T.	....	T.	....	T.	.01	....	....	T.	T.	T.	T.	....	....	.25	....	.16	.24	....	5.13
pe May	...do	.65	.02	T.	....	....	.07	.26	.89	1.20	.73	....	....	....	....	....	....	....	....	....	....	....	....	T.	T.	....	....	.22	....	.30	.47	....	4.81
ng Branch**	...do	.36	.86	T.	....	....	.26	.10	.69	.66	.20	....	.10	.03	....	T.	T	.02	....	....	....	.03	.06	.29	....	....	T.	.39	....	.03	.10	....	4.18
ndy Hook***	...do	.40	.46	.01	....	....	.45	.23	.42	.66	.21	....	.01	T.	....	T.	T.	T.	....	....	....	.05	.01	.22	....	....	.02	.23	....	.01	.04	....	3.43

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-tion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	30.15	30.61	16	29.56	30	17.7	54	e.	1	81	70	72	33
ng Branch	30.14	30.64	16	29.50	2	......	......	......	......	79	68	72	......
oorestown	......	......	......	......	......	......	......	......	......	80	68	72	......
w York, N. Y	30.13	30.63	16	29.51	2	16.8	60	nw.	27	73	69	68	40
iladelphia, Pa	30.16	30.63	16	29.54	30	13.6	39	w.	27	72	64	66	35
dgefield	30.13	30.64	16	29.50	2	......	......	......	......	......	......	......	......
ndy Hook	30.12	30.62	16	29.48	30	16.3	43	w.	27	80	73	79	31
enton	30.15	30.62	16	29.51	30	11.9	42	nw.	27	78	66	72	31
rona	......	30.62	16	29.50	30	7.7	43	w.	27	74	64	66	......

Daily Temperatures for January, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	38	41	43	39	39	55	58	45	38	41	39	41	65	68	61	62	45	52	43	....	....	....	....	....	....	44	45	50	41	54	37	47.4
	Minimum	28	35	38	25	32	38	43	31	33	33	27	37	40	38	37	35	36	42	30	....	....	....	....	....	29	27	39	30	26	37	23	33.3
Charlotteburg	Maximum	36	34	42	40	38	53	58	45	34	32	36	37	68	69	65	64	40	53	48	51	48	56	51	44	41	44	44	45	44	54	53	47.3
	Minimum	26	32	31	28	27	33	48	26	31	27	26	26	36	37	34	33	32	38	26	28	27	34	32	37	27	24	36	32	18	36	18	30.
Dover	Maximum	36	38	40	36	38	55	58	45	36	39	37	40	67	69	63	51	43	52	41	51	41	55	46	50	39	42	44	46	38	54	43	46.2
	Minimum	29	33	34	27	29	36	36	30	33	29	25	25	38	40	37	33	34	35	28	26	30	39	37	32	30	28	38	26	25	29	18	31.3
Layton	Maximum	32	34	35	35	35	55	55	36	33	33	31	35	56	57	56	56	36	48	40	47	40	54	51	46	36	40	42	42	34	35	34	41.9
	Minimum	18	32	33	30	32	33	30	22	26	30	22	25	35	35	35	32	32	36	25	26	25	34	33	30	27	20	38	26	30	32	19	29.1
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Newton	Maximum	35	36	40	35	39	56	60	39	34	39	36	39	68	70	65	59	44	52	43	52	42	56	55	48	38	43	46	47	39	38	36	46.1
	Minimum	22	30	30	25	25	33	35	29	29	28	23	26	36	45	46	33	31	38	26	25	26	36	30	30	27	27	36	29	23	21	17	29.6
Phillipsburg	Maximum	39	42	42	38	41	57	59	41	38	41	38	46	68	67	61	52	46	53	41	51	45	57	50	48	41	44	46	47	43	56	32	47.4
	Minimum	33	36	34	27	31	39	39	33	35	33	30	34	45	39	38	37	33	38	31	32	33	41	41	34	31	29	40	29	29	31	20	34.0
Sussex	Maximum	35	35	38	37	39	55	56	43	34	37	35	35	65	66	65	61	42	50	40	49	49	54	51	48	40	42	44	43	43	51	42	45.9
	Minimum	23	32	33	29	26	33	41	27	31	32	23	25	35	36	37	33	32	38	30	26	27	34	31	35	27	26	38	33	24	33	22	30.7
The Red Sandstone Plain.																																	
Boonton§§	Maximum	39	39	43	38	42	59	52	49	38	40	38	58	70	68	71	41	52	54	47	51	43	56	54	46	42	46	52	48	54	55	37	49.1
	Minimum	22	34	34	36	29	29	41	32	32	31	27	26	30	37	37	36	34	35	31	24	29	32	37	37	28	23	28	35	24	33	24	31.2
Canoe Brook§§	Maximum	40	42	44	38	51	59	51	54	38	41	38	61	69	70	63	52	52	54	45	52	43	54	50	48	45	46	46	48	55	56	44	50.0
	Minimum	25	32	33	24	30	34	43	30	33	28	27	27	32	35	34	34	36	38	30	23	25	35	38	39	25	23	38	27	21	32	23	30.
Elizabeth	Maximum	40	42	45	43	42	58	60	47	39	41	39	46	70	72	67	66	49	58	50	52	49	55	55	50	45	46	50	50	45	58	47	50.
	Minimum	32	34	35	31	33	39	44	36	36	31	30	31	42	43	40	37	39	46	32	29	31	39	41	42	28	27	41	31	31	43	25	35.
Flemington	Maximum	40	41	44	38	40	56	59	44	38	44	42	44	70	74	67	67	46	52	47	55	47	60	55	50	43	45	48	56	40	57	39	49.9
	Minimum	30	34	32	26	33	35	44	33	34	32	29	29	40	41	37	35	37	44	32	28	32	40	40	41	27	28	39	34	27	39	24	34.0
Jersey City	Maximum	41	42	40	38	41	56	57	43	42	40	38	56	68	68	66	50	50	54	42	51	48	55	50	51	41	45	51	48	50	57	36	48.9
	Minimum	36	37	34	31	34	41	42	35	34	32	29	34	52	51	50	38	40	38	32	34	37	41	42	38	32	32	42	36	35	36	24	37.1
Lambertville	Maximum	41	43	44	38	39	56	58	40	37	39	38	51	68	71	68	67	50	54	44	52	46	58	54	52	40	44	46	50	44	58	36	49.
	Minimum	28	34	37	25	32	37	38	34	33	31	28	30	50	49	45	33	37	43	30	29	37	40	40	35	30	26	40	33	30	36	23	34.0
Little Falls§§	Maximum	40	43	43	35	48	60	55	47	40	42	38	61	70	72	66	42	53	56	43	53	45	56	70	50	42	47	48	51	55	56	34	50.4
	Minimum	23	35	34	27	30	33	47	32	33	30	28	28	32	39	38	37	36	40	31	26	29	36	37	38	31	27	39	35	28	33	24	32.
New Brunswick	Maximum	40	44	44	40	40	57	60	46	39	40	37	47	70	71	70	69	51	55	48	51	48	56	55	50	44	44	52	49	45	60	42	50.
	Minimum	30	35	38	29	32	36	46	35	35	32	30	29	41	43	43	37	38	45	31	29	31	40	41	42	30	27	41	32	31	42	25	35.4
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Plainfield	Maximum	41	42	40	38	41	55	52	43	42	41	39	57	70	70	67	47	50	55	42	52	48	56	50	51	41	45	50	48	50	56	38	48.9
	Minimum	29	37	34	28	32	40	40	34	34	31	27	31	43	47	37	36	40	43	31	27	28	39	40	39	28	25	39	27	33	38	24	34.
Ridgefield	Maximum	42	40	41	37	42	56	60	38	40	40	36	54	69	70	64	41	48	54	40	52	49	54	45	49	41	44	50	48	42	55	32	47.
	Minimum	32	35	33	30	32	39	37	34	34	29	28	30	51	46	41	37	38	34	31	31	34	37	39	35	31	31	42	34	31	32	22	34.
Somerville	Maximum	40	42	45	37	41	57	60	45	39	41	40	46	70	73	68	67	48	56	45	54	47	57	55	51	45	46	49	52	43	58	41	50.
	Minimum	32	35	35	24	33	36	45	33	35	35	29	31	38	39	36	34	38	45	30	27	29	40	40	35	27	25	40	29	27	41	24	33.
Verona	Maximum	37	38	40	32	39	57	58	38	36	32	33	52	67	67	64	44	47	53	38	50	42	53	44	50	38	43	45	45	45	54	30	45.
	Minimum	29	33	34	29	32	39	38	33	33	29	27	29	52	48	49	36	35	32	30	20	34	36	37	34	31	30	40	32	30	29	23	33.
New York, N. Y	Maximum	41	43	40	38	42	55	59	43	42	40	38	55	67	68	66	50	50	54	41	51	49	54	50	50	41	45	52	48	50	59	33	48.
	Minimum	36	33	34	32	34	41	43	35	32	29	29	35	55	51	50	38	38	38	32	34	39	42	42	38	34	33	42	36	36	31	21	36.9
The Southern Interior.																																	
Belleplain	Maximum	50	52	47	45	45	58	59	50	46	41	42	60	68	75	75	67	54	59	55	54	51	59	59	62	45	47	52	51	51	59	42	54.
	Minimum	34	41	38	27	35	38	49	36	37	32	25	27	53	46	43	37	38	50	29	21	33	35	47	43	25	18	44	34	28	42	27	35.
Bridgeton	Maximum	51	50	46	45	43	56	61	43	39	40	43	59	71	71	74	68	53	57	43	55	51	56	56	63	45	47	54	50	51	61	38	52.
	Minimum	32	40	38	29	35	38	41	35	36	30	27	29	51	53	43	37	39	38	31	28	37	38	47	37	31	25	42	34	32	35	27	36.
Burlington	Maximum	45	48	48	41	49	57	62	48	41	43	40	58	70	75	71	69	53	56	54	50	51	55	54	56	48	45	49	51	51	61	44	53.
	Minimum	37	43	40	36	30	39	47	35	36	34	31	33	48	45	50	37	42	40	31	29	37	40	43	37	31	26	41	36	31	44	28	37.
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Freehold	Maximum	44	47	44	40	42	56	61	48	39	38	38	56	68	71	71	68	51	55	48	49	48	57	52	54	43	46	51	47	50	60	42	51.
	Minimum	29	36	37	27	33	36	47	35	36	27	27	30	53	46	44	35	39	47	31	28	34	41	42	42	30	27	41	34	32	41	25	35.
Hammonton	Maximum	47	50	46	44	43	57	60	49	42	45	44	60	71	76	76	71	54	59	48	55	54	54	56	61	49	47	58	50	51	62	50	54.
	Minimum	30	40	38	25	34	37	47	34	32	31	25	29	53	48	42	35	34	46	25	27	34	37	44	40	25	22	38	28	32	42	20	34.
Hightstown	Maximum	48	48	48	48	55	63	56	42	42	46	41	61	70	73	72	48	56	57	42	51	56	56	54	50	41	54	53	50	60	62	41	53.
	Minimum	38	36	26	32	42	49	34	35	33	30	36	42	40	44	30	38	44	31	28	35	40	40	41	32	27	34	34	30	42	25	18	35.
Indian Mills	Maximum	46	50	47	43	43	56	60	50	40	40	43	59	70	75	75	72	54	58	54	54	50	58	54	60	45	47	53	48	51	61	44	53.
	Minimum	30	38	40	27	34	39	50	33	36	32	25	30	55	50	42	37	40	50	28	24	36	41	46	45	25	21	41	31	27	44	26	36.
Lakewood	Maximum	45	49	46	41	43	55	60	45	42	39	36	59	70	70	75	70	52	58	49	51	49	57	55	58	43	46	53	47	51	58	42	52.
	Minimum	32	39	40	29	35	38	45	36	37	33	26	33	53	47	43	38	40	48	31	27	34	43	45	43	27	24	43	34	27	42	27	36.
Moorestown	Maximum	45	48	43	38	42	57	61	40	37	40	38	57	70	72	70	50	53	57	41	50	50	55	54	54	40	44	49	49	51	63	30	49.
	Minimum	34	39	36	27	34	39	40	35	32	31	28	32	57	47	46	38	39	35	29	28	37	40	44	44	31	27	40	32	31	32	19	35.
Pemberton	Maximum	45	49	45	41	43	56	61	46	41	41	40	59	69	70	73	70	53	57	51	50	50	56	55	57	43	46	52	48	51	61	43	52.
	Minimum	30	40	40	29	35	39	46	35	37	32	28	33	56	48	45	38	40	50	31	28	37	42	46	38	30	26	41	34	31	43	27	37.
Pleasantville§§	Maximum	51	50	46	43	51	56	55	54	42	42	46	54	61	72	76	51	58	61	53	55	51	61	63	51	50	51	52	50	47	57	55	53.
	Minimum	29	44	38	26	28	37	50	37	37	32	25	24	45	50	42	38	39	48	28	23	32	36	46	46	25	21	24	34	28	47	29	35.
Runyon	Maximum	36	40	40	38	50	60	60	46	42	41	38	58	70	72	69	72	64	48	44	54	58	56	48	54	42	52	50	52	48	44	38	51.
	Minimum	26	34	34	20	30	38	50	30	32	31	28	32	40	33	33	44	40	32	22	40	34	34	40	28	25	17	40	25	34	34	22	32.
Trenton	Maximum	42	46	45	40	45	57	60	41	30	41	39	56	66	73	70	50	53	56	42	53	51	57	53	53	40	46	48	50	52	61	32	50.
	Minimum	34	36	36	31	35	40	41	35	32	32	32	35	56	44	46	38	39	36	32	32	40	42	42	36	33	32	41	35	35	32	20	36.
Tuckerton	Maximum	55	55	57	56	59	60	62	60	56	55	50	60	70	72	75	62	56	55	55	58	59	60	60	59	61	62	59	60	57	60	58	58.
	Minimum	35	36	35	28	34	40	40	42	35	30	31	40	41	45	48	30	36	38	30	34	37	36	40	37	37	41	30	35	32	40	30	36.
Philadelphia, Pa	Maximum	46	49	41	41	44	58	61	47	41	43	43	59	70	73	71	54	55	58	44	51	51	57	59	59	44	46	49	51	53	62	34	52.
	Minimum	38	43	40	36	39	43	47	38	34	34	36	38	58	49	50	41	42	39	36	35	44	45	47	42	37	35	43	39	40	34	23	40.
The Sea Coast.																																	
Asbury Park	Maximum	45	48	45	40	43	55	60	46	41	41	38	50	56	73	76	69	48	58	42	51	46	59	54	59	41	49	54	49	49	58	37	51.
	Minimum	39	38	39	32	35	41	45	40	37	32	31	36	47	49	44	39	41	41	32	32	39	44	44	39	32	31	41	35	42	37	26	38.
Atlantic City	Maximum	50	49	46	42	56	52	56	46	43	42	44	52	58	67	65	59	50	59	44	54	49	60	53	61	44	48	51	51	50	56	36	51.
	Minimum	42	44	40	34	40	46	43	41	34	33	30	44	49	45	44	40	44	38	33	38	41	48	46	40	35	32	42	37	44	34	22	39.
Cape May	Maximum	51	51	46	47	45	51	55	47	43	41	45	52	55	57	70	52	52	59	42	54	51	60	59	60	46	49	51	47	51	54	37	51.
	Minimum	45	44	40	34	40	45	45	39	34	32	33	42	48	46	44	40	45	41	31	37	41	45	48	37	35	30	42	38	42	36	25	39.
Long Branch	Maximum	41	46	40	41	44	60	62	45	40	37	38	50	71	71	74	48	51	56	41	50	47	56	54	53	39	46	51	50	50	56	34	49.
	Minimum	30	29	33	30	30	40	40	30	31	30	29	35	48	44	44	40	40	35	31	30	36	43	40	39	33	30	33	32	30	30	20	34.
Sandy Hook	Maximum	43	43	43	39	41	54	57	42	39	40	39	54	65	66	65	49	51	54	40	49	46	53	49	47	41	45	52	46	50	58	34	48.
	Minimum	36	38	38	34	35	41	41	38	35	34	33	39	52	44	46	40	40	38	35	35	40	42	43	40	36	35	42	37	40	34	23	38.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.   §§ Instruments are read in the morning; the maximum temperature then read is charg
to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.010	.096	*	.080	.008	*	.018	.002	*	*	.040	.020	.036	.048	.128	.064	.010	*	*	.224	.032	.016	*	*	*	.160	.160	.064	.250	.150	*	1.6
	Wind movement	61	211	148	85	35	48	137	82	62	91	61	52	102	98	42	111	60	98	103	61	71	44	31	104	88	46	113	143	66	87	128	26
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation.   * Measurement included in next followi
record.   ** Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. FEBRUARY, 1932. No. 2.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The abnormally mild weather was continued throughout February and the winter passed in to meterological history as the second warmest, for the state as a whole, of the past 47 years. The record is still held by the winter of 1889-90 with an average temperature of 40.9 degrees, as against 39.3 degrees for the one just ended. The first half of February was decidedly above the normal on almost every day, while during the latter half the 22d, 26th and 27th were outstandingly warm; the remaining days were near the normal figures. The highest temperatures registered were about 60 degrees and occurred mostly on the 8th and 12th in the northern part of the State and on the 26th in the southern portion. The lowest ranged between 5 and 15 degrees above zero; they were recorded mostly on the 21st and 25th and were, as a rule, the lowest recorded so far this winter.

Precipitation was deficient. The greater part of the monthly otal fell during the first twelve days, rain being frequent durng that period. Other dates on which precipitation was rather general were the 17th and 28th, the latter being mostly for the northern portion. The average for the State was about 60% of he normal, ranging from 50% and 55% over the Southern Inerior and Sea Coast sections to 60% in the Sandstone Plain and 75 % in the Highlands. The snowfall was about as small in amount as is ever received during February, varying from beween 5 and 10 inches in the Highlands to less than an inch in he southern portion. Nearly all of it fell during the 17th.

There was no appreciable damage noted on account of extreme weather events, while the unusually mild conditions gave an arly impetus to the agricultural activities and developements ncident to Spring.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 35 stations, was 35.9°, which was 6.1° above ormal. The highest temperature was 69° at Belleplain, Hammonton and Indian Mills on the 26th, and the lowest, 4°, at Runyon on the 21st and Charlotteburg on the 25th. The greatst daily range of temperature was 44° at Hammonton on the 6th. The highest monthly mean temperature was 40.1° at Tuckerton, and the lowest, 31.7° at Newton.

The temperature departure from the normal for the year, 1932, o date, by sections, is: The Highlands, +9.2°; Red Sandstone lain, +9.0°; Southern Interior, +9.8°; Sea Coast, +8.6°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 2.16 inches, which was 1.54 inches elow normal. The average total snowfall at 20 selected staons was 2.2 inches. The greatest monthly precipitation was .23 inches, at Culvers Lake, and the least, 1.08 inches at Tuckerton. The greatest amount of precipitation in any 24 consecuve hours was 1.76 inches at Cape May on the 4th. The mean f the number of days on which 0.01 inch or more of precipitaon fell was 9, or normal.

The precipitation accumulated departure from the normal for he year, 1932, to date, by sections, is: The Highlands. —0.48 nch; Red Sandstone Plain, —0.95 inch; Southern Interior, —0.55 inch; Sea Coast, —0.89 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 14 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 46 miles per hour from the northwest at Atlantic City on the 5th.

MISCELLANEOUS.

The per cent of possible sunshine was 50, or 6 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.01 inches, or 0.09 inch below normal. The highest reading was 30.67 inches at Trenton on the 1st, and the lowest 29.37 inches at Long Branch on the 4th.

The mean stage of the Delaware River at Phillipsburg was 4.2 feet, and the highest 6.7 feet on the 13th. The mean stage at Trenton was 2.3 feet, one foot below the normal. The highest was 4.2 feet on the 14th.

A thunderstorm was noted at Long Branch on the 10th. On the 11th a thunderstorm occurred in the northern part of the State, several stations reporting the occurrence of same. Dense fog occurred on the following dates: 3, 9, 10, 11, 12 and 26. Sleet occurred at various points in the State on the following dates: 1, 4, 10, 17, 28 and 29.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	23.9	54	−2	3.93	5.85	1.44	......	......	......	......	......
1886	28.9	64	−10	5.42	8.00	4.13	......	......	......	......	......
1887	33.9	69	6	5.24	6.74	4.13	......	......	......	13	13
1888	30.6	60	−5	3.53	6.01	2.04	......	......	......	9	8
1889	27.7	53	−3	2.49	3.80	1.65	......	......	......	9	8
1890	**39.9**	76	14	4.17	5.32	2.43	......	......	......	12	10
1891	38.0	71	1	5.11	7.20	3.70	......	6	9	13	14
1892	33.6	58	7	1.63	3.62	0.67	......	7	9	13	7
1893	30.1	63	−1	5.73	8.90	3.14	....	7	8	13	11
1894	29.7	62	−11	4.42	6.17	3.25	......	9	8	11	11
1895	23.6	57	−12	1.28	2.34	**0.55**	11.6	13	9	6	5
1896	32.1	62	−12	**6.77**	**10.06**	4.82	6.7	9	9	11	12
1897	32.5	59	−6	3.61	6.37	2.38	8.0	8	10	10	8
1898	32.7	65	−15	3.48	5.45	1.55	2.0	12	7	9	9
1899	25.8	60	−17	6.06	8.77	3.78	**31.3**	10	6	12	15
1900	31.0	69	−6	5.30	7.88	3.27	9.6	9	9	10	10
1901	25.4	52	−6	**0.94**	1.65	0.69	4.9	15	9	4	4
1902	27.4	62	−7	6.24	8.44	4.29	16.5	12	6	10	9
1903	33.7	70	−16	4.87	6.60	3.74	6.7	12	8	8	10
1904	24.8	65	−16	2.45	3.09	1.36	5.6	13	8	8	8
1905	**23.4**	53	−18	2.53	3.96	0.70	7.3	14	7	7	7
1906	30.9	64	−12	2.58	3.85	1.77	5.4	14	7	7	7
1907	23.6	55	−22	2.67	3.90	1.82	20.8	14	7	7	8
1908	28.1	65	−17	4.79	7.44	2.85	11.9	10	10	9	9
1909	37.8	72	−2	4.96	6.78	3.55	2.3	6	10	12	12
1910	30.5	69	−11	3.08	4.81	1.06	6.2	10	9	9	10
1911	30.9	67	−12	2.78	4.06	1.76	11.2	8	7	13	11
1912	27.7	61	−14	2.49	3.12	1.68	2.8	11	12	6	5
1913	30.6	70	−5	2.49	3.21	1.48	3.5	16	6	6	7
1914	25.9	67	−12	2.85	4.94	1.89	15.1	12	7	9	9
1915	35.7	75	−7	5.37	7.28	2.97	3.5	11	6	11	8
1916	28.1	63	−18	4.21	6.17	2.84	11.4	10	6	13	11
1917	28.1	62	−19	1.95	2.80	0.92	8.3	10	9	9	11
1918	29.0	67	**−23**	2.08	3.41	1.03	2.6	12	8	8	7
1919	33.6	65	4	3.39	6.48	1.37	1.2	15	4	9	10
1920	27.9	54	−17	4.20	7.20	2.39	20.0	11	8	10	11
1921	34.0	71	−5	3.81	5.82	2.58	13.6	10	8	10	10
1922	33.6	73	−10	2.94	4.60	1 80	8.5	10	8	10	10
1923	26.1	56	−12	2.58	3.74	1.51	13.8	10	8	10	12
1924	28.9	62	−3	4.10	6.11	2.45	11.9	13	5	11	9
1925	37.3	72	−1	2.23	4.64	1.18	**0.7**	12	6	10	7
1926	29.4	57	−11	4.54	6.30	2.86	21.2	9	5	14	11
1927	36.1	66	4	3.12	4.55	2.18	5.1	10	8	10	11
1928	32.1	63	−6	4.05	5.63	2.17	4.4	12	7	10	10
1929	31.6	63	−9	4.06	5.92	2.76	9.2	13	7	8	8
1930	35.6	**80**	−10	2.80	5.13	1.07	4.2	13	7	8	9
1931	33.3	62	−9	2.18	3.42	0.81	3.0	14	5	9	8
1932	35.9.	69	4	2.16	3.23	1.08	2.2	11	6	12	9
Normal	29.8	......	......	3.80	......	......	8.8	11	9	9	9
Extremes	......	80	−23	......	10.06	0.55	......	......	......	......	......

W. B. O. Philadelphia-3-26-32-1370

Climatological Data for February, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	....	....	60	12	....	....	....	2.44	−1.54	0.66	5.0	9	....	....	....	....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	32.8	+7.2	59	12†	4	25	34	3.32	−0.84	1.60	4.8	13	15	4	10	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	....	....	....	....	7	16	....	3.23	+0.06	1.75	10.0	10	10	10	9	e.	Brice E. Riker.
Dover	Morris	600	48	32.3	+6.1	57	12	9	25	28	2.69	−1.48	0.71	5.5	12	5	14	10	....	William C. Harris
Layton	Sussex	480	31	....	....	....	....	5	25	....	3.05	+0.21	1.52	5.8	8	8	3	18	nw.	A. M. Depue.
Long Valley	Morris	520	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	S. N .Dilts.
Newton	Sussex	769	48	31.7	+5.2	59	12	9	21	32	2.92	−0.77	1.30	9.6	11	8	7	14	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	34.8	+6.9	59	12	16	21	28	1.56	−2.21	0.73	2.0	8	11	9	9	....	Town Engineer.
Sussex	Sussex	442	37	32.2	+6.8	60	12	8	25	28	2.59	−0.91	1.37	5.2	7	12	3	14	ne.	A. J. W. Mowatt
Means and extremes	....	....	....	32.8	+6.4	60	12	4	25	34	2.71	−0.94	1.75	5.1	10	10	7	12	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	33.1	+6.0	60	8†	10	24	40	2.35	−1.76	1.10	....	9	13	2	14	nw.	John Kline.
Canoe Brook	Essex	173	2	33.1	....	57	8	9	25	36	2.12	....	0.97	....	8	10	7	12	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	....	....	....	....	....	....	....	2.92	−0.63	0.52	....	13	16	4	9	....	Paul Molitor. Sr.
Elizabeth	Union	45	53	36.3	+5.8	59	8†	14	21	32	2.26	−2.06	0.75	2.8	12	16	4	9	nw.	Union County Park Com.
Flemington	Hunterdon	140	§46	35.4	+6.6	60	12	14	21	30	2.17	−1.50	0.46	2.5	11	18	2	9	w.	Hiram E. Deats.
Jersey City	Hudson	10	34	36.2	+5.6	57	8†	18	21†	19	2.42	−1.43	0.70	2.5	12	9	11	9	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	35.1	+4.7	61	26	13	15†	31	1.43	−2 17	0.40	1.5	11	13	5	11	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	34.0	+4.4	60	8	12	25	36	2.77	−0.82	1.31	3.1	12	14	5	10	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	35.6	+4.8	58	8†	14	21	29	1.68	−2.07	0.54	1.5	8	12	9	8	nw	N. J. Experiment Station
New Milford‡‡	Bergen	....	14	....	....	....	....	....	....	....	2.91	....	1.24	....	12	....	....	....	....	Hackensack Water Co
Paterson	Passaic	80	61	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Vincent A. Messineo.
Plainfield	Union	120	44	34.7	+6.0	58	8	12	21	28	2.56	−1.54	0.91	4.3	9	11	7	11	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	34.4	....	57	8	16	16†	27	2.95	....	1.47	3.4	9	10	8	11	nw.	George P. Kirsten.
Somerville, near	Somerset	70	49	35.4	+6.5	59	8†	12	21†	31	1.79	−2.12	0.72	2.6	9	11	2	16	nw.	Julius Gerlich.
Verona	Essex	490	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	14	....	....	....	....	....	....	....	2.63	....	1.05	....	11	....	....	....	....	Hackensack Water Co.
New York, N.Y.	....	365	62	36.0	+4.7	58	8	17	16	27	2.38	−1.44	0.81	2.2	13	6	12	11	nw.	U. S. Weather Bureau.
Means and extremes	....	....	....	34.8	+5.6	61	26	9	25	40	2.35	−1.61	1.47	2.7	10	13	5	11	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	38.5^{a}	+7.0	69	26	9	24	42	2.63	−1.09	1.56	0	9	2	11	16	uw.	A. F. Waldron.
Bridgeton	Cumberland	30	49	38.5	+4.8	67	26	16	21†	37	2.45	−1.41	1.16	0	7	12	7	10	s.	Bennett K. Matlack
Burlington	Burlington	12	§46	38.2	+6.9	62	26	15	23	35	1.80	−1.82	0.37	0.2	9	12	6	11	nw.	Public Service Power Co.
Clayton	Gloucester	134	32	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	G. E. Lamb.
Freehold	Monmouth	194	¶27	36.3	....	62	26	14	21	33	1.31	−2.85	0.33	0.1	10	13	4	12	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	37.4	....	69	26	11	21	44	1.60	−1.93	0.80	0.5	7	18	4	7	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	38	39.2	+9.8	68	22	11	25	38	1.41	−2.32	....	1.0	....	17	4	8.	w.	S. Elwood Croshaw.
Indian Mills‡‡	Burlington	76	43	37.8	+6.0	69	26	10	21	42	1.70	−1.87	0.60	0.5	7	14	3	12	sw.	James M. Armstrong.
Lakewood	Ocean	54	28	36.7	+7.0	66	26	12	21†	38	1.36	−2.34	0.40	0.2	9	12	5	12	sw.	R. W. Holman.
Moorestown	Burlington	....	69	36.0	+4.7	66	26	13	21	42	1.60	−2.00	0.57	2.0	11	15	3	11	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	....	....	....	....	....	....	....	2.21	−0.68	1.36	....	7	....	....	....	....	William L. Flick.
Pemberton	Burlington	55	....	37.8	....	66	26	17	21†	34	1.45	....	0.44	T.	10	11	7	11	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	36.9	....	63	12	9	21	33	2.29	−0.62	1.29	....	10	15	5	9	nw.	N. J. Water Policy Comm.
Runyon‡‡	Middlesex	18	8	33.5	....	62	27	4	21	39	1.90	....	0.56	....	7	17	6	6	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	36.8	+6.1	63	26	17	16	29	1.51	−1.90	0.55	1.3	8	7	7	15	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	....	....	....	....	....	....	....	1.56	....	0.63	0.6	12	....	....	....	....	Edward H. Ristow.
Tuckerton	Ocean	23	39	40.1	+9.3	64	26	16	25	40	1.08	−2.71	0.32	0.1	12	6	11	12	ne.	John H. Brown.
Philadelphia, Pa	....	117	61	39.6	+5.7	64	26	23	1	27	1.58	−1.85	0.63	T.	9	8	8	13	nw.	U. S. Weather Bureau.
Means and extremes	....	....	....	37.4	+6.8	69	26	4	21	44	1.74	−1.81	1.56	0.5	9	12	6	11	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	37.4	+6.0	62	26	18	1†	26	1.55	−2.07	0.52	T.	7	21	5	3	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	39.0	+5.4	59	12	20	1	22	2.28	−1.20	1.47	T.	8	5	11	13	nw.	U. S. Weather Bureau.
Cape May	Cape May	17	48	40.0	+5.9	60	12	20	21	24	2.77	−0.64	1.76	0	6	5	10	14	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	34.4	+4.0	62	26	15	21	34	2.04	−2.01	0.60	1.5	11	12	6	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	36.4	+5.8	53	13	21	21	20	1.61	−2.29	0.62	1.3	10	9	10	10	nw.	U. S. Weather Bureau.
Means and extremes	....	....	....	37.4	+5.4	62	26	18	1†	34	2.05	−1.64	1.76	0.6	8	11	8	10	nw.	
For the State	....	....	....	35.9	+6.1	69	26	4	21†	44	2.16	−1.54	1.76	2.2	9	11	6	12	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for February, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
elvidere	Delaware	....	.66	....	.14	.44	....	....	.10	....	.03	.45	....	....	....	....	....	.20	....	....	....	....	....	....	.06	....	....	....	.36	....	....	....	2.44
harlotteburg	Passaic	....	.20	.02	.13	.63	....	....	.13	....	.06	1.60	.04	....	....	....	....	.20	....	....	....	....	T.	.03	.03	....	....	....	.19	.06	....	....	3.32
ulvers Lake	Delaware	....	.16	T.	.11	.34	....	....	.15	....	.04	1.75	T	....	....	....	....	.16	T.	....	T.	....	....	T.	.03	....	....	....	.41	.08	....	....	3.23
over	Passaic	....	*	.30	.63	....	....	....	.15	....	.20	.71	.05	....	....	....	....	.20	....	T.	....	....	.06	.05	....	....	....	....	.27	.07	....	....	2.69
ayton	Delaware	....	.25	T.	.44	.03	....	....	.10	....	.16	1.52	....	....	....	....	....	.34	....	....	....	....	....	T.	....	....	....	....	.21	....	....	....	3.05
ong Valley	Morris	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
ewton	Delaware	.51	.21	T.	.04	T.	....	....	.14	....	.10	1.30	.04	....	....	....	....	.10	T.	....	T.	....	....	T.	.04	....	....	....	.38	.06	....	....	2.92
hillipsburg	...do	....	.14	....	.73	T.	....	....	.03	....	.26	.06	.03	....	....	....	....	.14	T.	T.	....	....	T.	....	T.	....	....	T.	.17	....	....	....	1.56
ussex	Hudson	....	.32	....	.14	....	....	....	.09	....	T.	1.37	....	....	....	....	....	.23	....	....	....	....	....	....	T.	....	....	....	.38	.06	....	....	2.59
The Red Sandstone Plain.																																	
oonton ‖	Passaic	....	T.	.29	T.	.66	....	....	.05	T.	T.	1.10	.01	T.	....	....	....	.15	.04	....	....	....	....	T.	T.	....	....	....	.04	.01	....	....	2.35
anoe Brook ‖	Essex	....	T.	.28	....	.97	....	....	.05	....	T.	.40	.04	.05	....	....	....	.05	T.	....	....	....	T.	T.	T.	T.	....	....	T.	.28	....	....	2.12
hatham ‖	...do	....	....	.34	T.	.42	....	....	.07	.09	....	.52	.31	.42	....	....	....	.24	....	....	T.	....	.02	T.	.03	.12	....	....	12	.22	....	....	2.92
lizabeth	Coast	....	.32	....	.10	.75	....	....	.05	....	.02	.41	.15	.02	....	....	....	.20	T.	....	T.	....	.02	T.	T.	....	....	....	.20	.02	....	....	2.26
lemington	Raritan	....	.22	.08	.28	.46	....	....	.02	....	.02	.25	.11	....	....	....	....	.38	T.	....	T	....	.06	....	....	....	....	....	.29	....	....	....	2.17
ersey City	Coast	....	.26	T.	.60	.25	....	....	.01	....	.01	.70	.10	....	....	....	....	.17	.01	T.	....	....	.02	.01	T.	....	....	....	.28	T.	....	....	2.42
ambertville	Delaware	....	.15	....	.40	.24	....	....	.03	....	.03	.06	.07	....	....	....	....	.34	....	....	....	....	.05	....	T.	....	....	....	.05	.01	....	....	1.43
ittle Falls ‖	Passaic	....	.01	.21	....	.87	....	....	.07	....	....	.01	1.31	.05	.03	....	....	.13	.01	....	....	....	....	.03	T.	T.	....	....	.04	....	....	....	2.77
ew Brunswick	Raritan	....	.12	.05	.09	.54	....	....	T.	....	T.	.29	.15	....	....	....	....	.27	T.	....	....	....	....	....	T.	T.	....	....	.17	T.	....	....	1.68
ew Milford ‖	Hackensack	....	....	.23	....	1.03	....	....	.06	.03	.04	1.24	....	.10	....	....	....	.03	.07	....	....	....	....	....	....	.03	....	....	.02	.03	....	....	2.91
aterson	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
lainfield	Raritan	....	.30	T.	.91	....	....	....	.02	....	T.	.75	.10	....	....	....	....	.21	....	T.	....	....	....	.01	.01	....	....	....	.25	T.	....	....	2.56
idgefield**	Hackensack	....	.19	....	*	.98	....	....	.03	....	.02	1.47	.10	....	....	....	....	.15	T.	T.	....	....	T	T.	.01	....	....	....	T.	T.	....	....	2.95
omerville	Raritan	....	.17	.01	.72	....	....	....	.01	....	T.	.32	.12	....	....	....	....	.30	....	....	....	....	.01	T.	T.	....	....	....	.13	T.	....	....	1.79
erona**	Passaic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
oodcliff Lake ‖	Hackensack	....	....	.19	....	.79	....	....	.10	.02	.05	1.05	.05	.09	....	....	....	.16	.05	....	....	....	....	....	....	....	....	....	....	.08	....	....	2.63
ew York, N. Y***	Coast	....	.26	T.	.77	.04	....	....	.02	....	.20	.49	.10	....	....	....	....	.16	.01	T.	....	....	.02	.01	T.	....	....	T.	.26	.04	....	....	2.38
The Southern Interior.																																	
elleplain	Tuckahoe	....	.25	.03	1.56	.07	....	....	.08	....	.02	....	.13	....	....	....	....	....	.03	....	....	.46	....	....	....	....	....	....	....	....	....	....	2.63
ridgeton	Coast	....	.33	....	1.16	.03	....	....	.05	....	.08	....	.12	....	....	....	....	.68	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2.45
urlington	Delaware	....	.20	T.	.36	.35	....	....	.05	....	.10	.05	.22	....	....	....	....	.37	....	....	....	....	....	....	....	....	....	....	.10	....	....	....	1.80
avton	...do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
reehold	Raritan	....	.06	.03	.25	.31	....	....	.05	....	.08	.01	.15	....	....	....	....	.33	....	....	....	....	.04	....	....	....	....	....	T.	....	....	....	1.31
ammonton	Mullica	....	.12	T.	.08	....	....	....	.02	....	.04	....	.12	....	....	....	....	.48	....	....	....	....	.02	....	T.	....	....	....	....	T.	....	....	1.60
ightstown	Raritan	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.41
dian Mills	Mullica	....	....	....	.60	.13	....	....	.07	....	T	.08	.20	....	....	....	....	.50	....	....	....	....	.12	....	....	....	....	....	T.	....	....	....	1.70
kewood	Metedeconk	....	.15	T.	.34	.18	....	....	.05	....	T.	.05	.15	....	....	....	....	.40	....	....	T.	....	.02	....	T.	....	....	....	....	.02	....	....	1.36
oorestown ‖	Delaware	....	....	.15	.06	.57	....	....	.06	....	.04	.05	.07	.16	....	....	....	.36	.02	....	....	....	....	....	....	....	....	....	....	.06	....	....	1.60
orthfield	Coast	....	.24	T.	1.36	....	....	....	.03	....	.01	....	.06	....	....	....	....	.46	....	....	....	....	.05	....	....	....	....	....	....	....	....	....	2.21
emberton	....	....	.14	.03	.44	.11	....	....	.05	....	.06	.01	.14	....	....	....	....	.43	....	....	....	....	.04	....	....	....	....	....	....	....	....	....	1.45
easantville ‖	Coast	....	....	.25	.12	1.17	....	....	.01	.06	.02	T.	....	.11	....	....	....	.42	.09	....	....	....	.04	....	....	....	....	....	....	....	....	....	2.29
nyon	Coast	....	....	.20	.10	.52	....	....	....	....	....	.44	.12	....	....	....	....	.31	....	....	....	....	....	....	....	....	....	....	.21	....	....	....	1.90
enton***	Delaware	....	.21	T	.55	....	....	....	.03	....	.04	T.	.14	....	....	....	....	.40	T.	....	....	....	.05	....	T.	....	....	....	.09	T.	....	....	1.51
enton No. 2 ‖	...do	....	....	.23	T.	.63	....	....	.01	T.	.03	.06	.04	.13	....	....	....	.20	.12	T.	....	....	.04	....	....	T.	....	....	.01	.06	....	....	1.56
ckerton	Coast	....	.07	.06	.21	.32	....	....	.11	.04	.02	.04	.09	.02	....	....	....	.08	....	....	....	....	.02	....	....	....	....	....	....	....	....	....	1.08
ila., Pa***	Delaware	....	.12	T.	.69	....	....	....	.04	....	.06	....	.20	....	....	....	....	.30	....	....	....	T.	.03	....	T.	....	....	....	.13	.01	....	....	1.58
The Sea Coast.																																	
bury Park	Coast	....	.19	.04	.52	T.	....	....	.05	....	.07	T.	.29	....	....	....	....	.39	....	....	....	....	....	T.	....	....	....	....	....	T.	....	....	1.55
lantic City***	...do	....	.24	T.	1.47	....	....	....	.03	....	.01	....	.03	....	....	....	....	.42	T.	....	....	T.	.06	....	T.	....	....	....	....	.02	....	....	2.28
pe May	...do	....	.22	.07	1.76	....	....	....	.05	....	T.	....	T.	....	....	....	....	.54	....	....	....	....	.13	....	....	....	....	....	....	....	....	....	2.77
ng Branch**	...do	....	.12	.08	.60	....	....	....	.03	....	.31	.20	.06	....	....	....	....	.50	....	....	....	....	.10	.01	T.	....	....	....	T.	.03	....	....	2.04
ndy Hook***	...do	....	.11	T.	.62	....	....	....	.04	....	.27	.15	.11	....	....	....	....	.23	T.	....	....	....	.05	.01	T.	....	....	....	T.	.02	....	....	1.61

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
lantic City	30.03	30.66	1	29.39	4	15.4	46	nw.	5	72	64	66	53
ng Branch	30.01	30.63	1	29.37	4	......	......	......	......	70	61	67	......
oorestown	......	......	......	......	......	......	......	......	......	75	61	65	......
w York, N. Y	30.00	30.61	1	29.39	4	16.3	51	nw.	18	67	61	64	56
iladelphia, Pa	30.03	30.69	1	29.48	4	12.7	43	nw.	5	64	56	57	49
dgefield	30.00	30.61	1	29.40	4	......	......	......	......	......	......	......	......
ndy Hook	30.00	30.62	1	29.39	4	14.6	44	nw.	18	81	71	76	50
enton	30.02	30.67	1	29.43	4	10.7	43	nw.	5	74	60	65	48
rona	......	......	......	......	......	......	......	......	......	......	......	......	......

Daily Temperatures for February, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Charlotteburg	Maximum	28	32	42	43	34	42	46	55	50	39	39	59	59	46	35	37	37	38	39	37	39	49	46	29	32	57	56	51	50	....	....	43.0
	Minimum	16	11	30	30	22	16	27	30	18	25	34	37	25	25	19	8	23	27	8	20	12	31	24	14	4	28	27	32	31	....	....	22.6
Dover	Maximum	31	34	40	40	36	41	48	56	41	42	40	57	51	41	35	37	38	38	38	32	38	51	40	30	25	56	56	45	41	....	....	41.3
	Minimum	16	17	32	31	24	18	28	31	19	27	36	38	27	21	20	12	23	21	12	16	13	32	18	14	9	30	28	32	32	....	....	23.3
Layton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	15	12	29	30	23	12	22	30	18	25	33	36	23	23	21	9	25	21	8	16	7	24	18	10	5	19	25	32	32	....	....	20.8
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	32	34	41	42	36	42	48	57	37	39	43	59	53	40	36	38	38	40	38	34	41	51	39	33	36	55	49	39	42	....	....	41.8
	Minimum	15	16	29	29	21	22	20	28	16	25	31	36	32	20	18	9	22	19	11	15	9	30	16	10	10	27	30	30	30	....	....	21.6
Phillipsburg	Maximum	32	34	42	42	39	44	50	58	34	43	45	59	51	43	38	35	38	40	41	36	40	50	36	34	39	58	57	41	46	....	....	43.0
	Minimum	19	25	34	35	28	23	28	31	24	31	39	34	28	25	21	17	28	26	17	24	16	30	20	18	19	32	29	35	33	....	....	26.5
Sussex	Maximum	28	34	40	42	36	42	43	52	43	38	40	60	52	46	32	36	38	40	39	37	39	47	46	30	36	49	50	43	41	....	....	41.3
	Minimum	18	15	31	30	24	18	25	31	18	25	24	36	24	25	22	12	25	28	12	22	11	25	25	21	8	29	25	32	32	....	....	23.2
The Red Sandstone Plain.																																	
Boonton§§	Maximum	31	35	42	52	34	44	50	60	39	43	41	58	60	42	35	36	45	45	41	31	39	51	40	31	35	55	56	39	55	....	....	43.6
	Minimum	19	16	23	29	26	19	26	30	20	22	31	36	29	29	22	13	16	30	14	19	11	17	26	15	10	15	28	31	33	....	....	22.6
Canoe Brook§§	Maximum	34	35	40	39	35	44	51	57	39	47	42	55	53	46	37	38	40	37	41	33	43	52	43	32	38	56	56	43	43	....	....	42.9
	Minimum	18	16	28	30	26	19	25	31	21	25	35	37	23	28	18	11	23	33	11	25	11	26	25	14	9	20	23	34	32	....	....	23.3
Elizabeth	Maximum	34	36	39	42	42	47	54	59	55	42	46	55	57	47	38	36	41	42	43	40	40	54	49	33	36	59	56	50	43	....	....	45.3
	Minimum	19	21	31	33	28	24	28	38	23	29	38	39	30	29	20	17	25	31	16	22	14	32	27	27	17	32	32	34	35	....	....	27.3
Flemington	Maximum	38	35	38	38	40	46	57	49	47	45	43	60	54	48	43	41	37	37	44	39	41	42	42	39	41	58	58	51	43	....	....	44.6
	Minimum	18	22	32	32	27	22	29	35	21	26	38	40	27	29	19	16	25	30	15	25	14	31	27	17	15	28	31	33	32	....	....	26.1
Jersey City	Maximum	33	39	42	44	38	45	53	57	39	48	46	55	51	43	36	36	44	42	40	34	40	51	34	33	38	57	55	41	45	....	....	43.4
	Minimum	20	26	34	34	27	28	36	42	24	33	37	41	34	25	23	20	31	24	21	19	18	34	25	18	23	34	37	35	35	....	....	28.9
Lambertville	Maximum	33	35	39	40	38	46	55	58	45	45	44	55	52	42	39	39	40	40	38	35	39	50	43	34	40	61	59	46	46	....	....	44.0
	Minimum	17	23	32	32	26	25	28	37	21	27	37	39	34	28	13	25	16	22	24	20	13	33	22	16	18	30	38	33	30	....	....	26.2
Little Falls§§	Maximum	34	35	43	38	37	46	52	60	43	44	41	57	55	44	39	39	41	37	43	33	44	55	34	34	38	57	58	39	42	....	....	43.5
	Minimum	20	18	28	32	26	23	28	35	22	25	35	36	27	28	22	15	20	33	17	25	13	21	21	16	12	21	28	33	34	....	....	24.6
New Brunswick	Maximum	32	37	39	41	43	44	51	58	50	47	45	54	54	46	40	35	39	41	40	38	40	50	44	33	37	58	55	47	45	....	....	44.2
	Minimum	18	23	31	34	28	24	29	37	23	26	38	39	35	29	19	16	24	32	16	26	14	34	27	17	17	29	32	32	35	....	....	27.0
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	33	39	40	44	38	45	54	58	37	48	46	56	51	44	38	36	44	42	41	34	40	51	34	33	39	57	57	42	45	....	....	43.7
	Minimum	17	20	33	31	27	21	32	40	22	27	37	39	28	24	20	14	28	24	15	22	12	33	25	16	14	29	31	32	32	....	....	25.7
Ridgefield	Maximum	32	36	41	40	35	48	51	57	38	45	39	53	53	43	37	35	42	39	42	32	39	53	34	33	35	56	54	37	41	....	....	42.1
	Minimum	20	22	31	32	27	27	34	30	23	31	37	39	33	24	22	16	26	22	18	19	16	34	18	17	16	34	32	35	35	....	....	26.6
Somerville	Maximum	37	34	38	41	39	46	53	59	48	47	45	55	55	45	41	38	39	40	44	38	41	55	42	36	42	59	57	47	47	....	....	45.1
	Minimum	18	21	32	32	28	21	28	36	21	26	38	40	29	27	18	13	25	28	15	25	12	31	26	15	12	28	29	34	34	....	....	25.6
Veroua	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	32	39	44	44	37	44	53	58	40	47	46	55	51	43	36	36	44	42	40	34	40	51	34	33	38	57	54	41	44	....	....	43.3
	Minimum	20	27	34	34	27	29	37	31	24	34	37	42	36	25	23	17	31	23	22	19	18	34	20	18	25	38	39	36	35	....	....	28.8
The Southern Interior.																																	
Belleplain	Maximum	33	43	53	48	50	46	58	57	54	53	68	64	58	....	42	40	47	53	49	39	47	45	45	40	41	69	61	45	52	....	....	50.0^{a}
	Minimum	17	19	39	36	29	22	25	39	24	25	42	50	27	....	14	29	10	33	27	16	27	17	31	9	13	27	36	37	35	....	....	27.0^{a}
Bridgeton	Maximum	34	41	51	50	47	45	57	58	45	51	65	65	57	41	39	38	46	45	43	39	45	53	43	36	42	67	65	40	51	....	....	48.2
	Minimum	19	23	37	36	29	27	30	39	25	27	42	46	31	28	21	19	29	32	20	28	16	35	26	16	20	30	36	37	31	....	....	28.8
Burlington	Maximum	33	39	44	44	46	46	55	60	57	47	52	56	56	50	41	37	39	44	40	39	40	52	50	36	41	62	61	60	53	....	....	47.6
	Minimum	20	23	34	36	29	25	38	30	25	29	40	41	30	34	22	19	24	35	19	26	18	34	15	18	26	29	45	37	35	....	....	28.8
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	32	40	43	45	46	44	52	57	48	48	45	54	55	44	39	34	42	41	41	37	42	50	47	33	38	62	56	45	44	....	....	45.0
	Minimum	19	26	32	34	28	26	32	40	23	27	39	41	36	29	19	16	23	33	17	27	14	35	27	16	15	29	30	35	33	....	....	27.6
Hammonton	Maximum	38	41	49	49	47	49	57	58	46	50	60	61	59	44	38	35	45	47	46	40	44	54	47	37	41	69	67	43	50	....	....	48.7
	Minimum	17	21	34	35	27	26	29	35	22	25	39	42	30	26	18	15	23	32	15	26	11	34	20	12	14	25	33	35	33	....	....	26.0
Hightstown	Maximum	46	46	48	60	55	58	48	61	57	48	44	46	54	57	48	37	37	44	44	43	35	68	48	38	40	61	58	41	45	....	....	48.8
	Minimum	32	40	43	25	36	36	32	34	28	40	30	36	34	30	18	17	24	38	17	26	14	30	36	12	11	32	36	34	36	....	....	29.6
Indian Mills	Maximum	33	42	48	48	46	50	57	57	54	49	59	60	58	52	40	41	44	44	44	40	43	50	49	38	40	69	64	50	49	....	....	48.9
	Minimum	17	18	36	34	29	23	27	37	28	25	41	43	27	29	16	18	23	35	12	27	10	36	23	11	13	27	33	37	35	....	....	26.6
Lakewood	Maximum	32	41	46	45	46	47	52	56	53	50	47	60	55	45	37	35	44	43	42	39	42	50	45	35	39	66	57	44	43	....	....	46.1
	Minimum	20	21	35	36	29	24	27	35	24	25	40	43	30	30	19	17	21	32	17	29	12	37	30	17	12	28	32	38	33	....	....	27.3
Moorestown	Maximum	32	40	46	45	40	46	54	58	55	46	53	54	54	44	37	37	43	43	42	43	39	50	51	34	39	66	62	47	60	....	....	46.9
	Minimum	18	22	33	35	23	25	31	31	24	23	36	40	34	26	20	18	25	23	18	20	13	15	13	15	19	24	32	36	32	....	....	25.0
Pemberton	Maximum	32	40	46	47	47	46	52	55	53	47	53	57	56	48	38	36	43	43	42	39	43	51	37	35	41	66	62	49	47	....	....	46.6
	Minimum	20	22	35	36	28	26	30	38	25	28	40	43	32	32	21	19	23	35	19	30	17	36	29	19	17	32	33	37	36	....	....	28.9
Pleasantville§§	Maximum	40	43	51	51	40	48	53	59	49	49	57	63	59	42	39	40	48	43	43	39	42	54	40	37	44	60	54	43	51	....	....	47.6
	Minimum	14	18	38	34	30	27	29	34	24	27	39	43	29	24	19	18	22	37	13	25	9	25	25	11	13	22	36	40	36	....	....	26.2
Runyon	Maximum	42	54	40	52	38	48	52	56	54	48	44	54	42	40	40	40	40	41	42	37	34	48	34	36	34	61	62	52	44	....	....	45.1
	Minimum	18	15	30	34	22	18	15	20	20	28	40	34	24	20	17	9	17	31	6	22	4	34	20	18	6	24	26	30	32	....	....	21.9
Trenton	Maximum	33	42	44	45	39	47	55	58	39	49	49	57	54	41	38	38	43	42	42	35	41	50	35	35	42	63	59	40	48	....	....	44.9
	Minimum	20	26	34	35	28	28	35	33	24	31	39	41	36	26	22	18	29	24	23	23	19	35	23	19	22	34	40	34	35	....	....	28.8
Tuckerton	Maximum	42	50	50	45	50	50	60	60	50	60	59	60	61	55	49	39	55	45	60	49	45	55	50	45	48	64	59	40	39	....	....	51.5
	Minimum	22	34	24	36	33	28	36	38	30	34	36	40	42	28	22	18	32	25	20	18	25	28	22	18	16	35	20	39	36	....	....	28.7
Philadelphia, Pa	Maximum	34	41	49	47	41	48	55	62	39	48	53	59	56	41	39	38	46	44	42	39	43	53	38	37	40	64	61	43	52	....	....	46.6
	Minimum	23	30	36	39	31	33	38	36	27	33	43	45	40	30	25	23	32	29	27	27	25	38	27	24	29	37	43	38	37	....	....	32.6
The Sea Coast.																																	
Asbury Park	Maximum	33	42	50	47	44	47	55	57	44	50	45	59	56	42	37	32	45	43	45	38	19	51	42	28	36	62	46	41	43	....	....	44.8
	Minimum	18	25	33	37	30	30	35	43	25	31	40	42	40	31	21	19	29	29	20	26	18	37	26	19	22	36	40	38	32	....	....	30.1
Atlantic City	Maximum	34	45	51	50	40	48	50	57	37	48	54	59	58	41	39	35	47	44	41	39	43	53	39	37	41	54	52	41	49	....	....	45.7
	Minimum	20	31	39	39	31	35	37	36	27	37	41	49	36	31	24	21	35	28	25	25	21	37	26	22	27	41	40	39	37	....	....	32.3
Cape May	Maximum	33	44	52	50	41	45	54	55	41	54	59	60	59	43	40	38	47	43	44	38	44	52	40	38	45	59	57	43	52	....	....	47.2
	Minimum	22	33	42	40	32	37	33	37	29	39	44	48	36	36	23	21	37	26	22	26	20	38	24	20	27	41	40	39	37	....	....	32.7
Long Branch	Maximum	33	37	40	41	36	46	56	61	42	50	50	58	53	40	36	30	43	38	40	33	40	47	39	32	37	62	47	43	46	....	....	43.8
	Minimum	20	24	28	31	26	26	30	27	20	30	30	40	33	20	20	20	26	22	17	19	15	31	20	18	17	35	32	30	33	....	....	25.5
Sandy Hook	Maximum	32	39	42	44	39	44	49	53	35	46	44	51	53	42	37	30	42	42	41	36	41	49	37	32	38	53	50	40	43	....	....	42.2
	Minimum	21	28	35	38	30	31	36	34	26	35	39	41	39	27	26	21	30	26	24	21	21	37	23	21	26	38	40	38	38	....	....	30.7

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. *Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVII. March, 1932. No. 3.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to he Superintendent of Documents, Government Printing Office, Washington, D. C. It s furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month averaged only slightly warmer than the preceding one of February. At a number of stations the March average was actually lower than the February mean, due to the fact that he latter month was unusually mild. This mild weather coninued through the first five to six days of March, after which the emperature was decidedly below normal until about the 17th. Beginning with the 18th and continuing through the remainder of the month the temperature kept above the normal with the highest points for the month, mostly in the sixties, generally reorded on the 26th and 30th. The lowest temperatures reached anged between five and fifteen degrees above zero and were reistered mostly on the 9th and 10th.

The precipitation was well distributed both throughout the month and over the State. In the latter characteristic the southrn portion was favored, 160% of the normal amount, as against State average of 134%. The heaviest general rain came on he 28th, and another general, but not so heavy one, on the 7th. The State average is the largest March average durng the past twenty years. The snowfall was mostly light, the eaviest amounts, as usual, being reported from the Highands, with a few stations in the southern portion also experiencng moderately amounts. The 7th and 21st were the dates on which most of it fell.

A storm of near-hurricane development, from a pressure tandpoint, moved up the Atlantic coast during the 5th to 7th. At Atlantic City a barometer reading of 28.37 inches was reorded. Gales caused an undetermined amount of damage along he coast but were apparently not as violent as the unusually ow pressure readings would indicate.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from bservations of 38 stations, was 36.7°, which was 1.9° below normal. The highest temperature was 69° at Boonton on the 26th, nd the lowest, 3°, at Culvers Lake on the 15th. The greatest aily range of temperature was 42° at Boonton on the 22d. The ighest monthly mean temperature was 39.4° at Tuckerton, and he lowest, 33.0° at Newton.

The temperature departure from the normal for the year, 1932, o date, by sections, is: The Highlands, +5.5°; Red Sandstone lain, +5.3°; Southern Interior, +5.8°; Sea Coast, +5.1°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from obervations of 45 stations, was 5.49 inches, which was 1.40 inches bove normal. The average total snowfall at 20 selected staons was 2.5 inches. The greatest monthly precipitation was .70 inches at Lakewood, and the least, 3.91 inches at Woodliff Lake. The greatest amount of precipitation in any 24 conecutive hours was 3.40 inches at Moorestown on the 28th. The mean of the number of days on which 0.01 inch or more f precipitation fell was 9, or 2 less than normal.

The precipitation accumulated departure from the normal for he year, 1932, to date, by sections, is: The Highlands, +0.40 nch; Red Sandstone Plain, +0.93 inch; Southern Interior, -2.06 inches; Sea Coast, +0.69 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 16 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 62 miles per hour from the northeast at Atlantic City on the 6th.

MISCELLANEOUS.

The per cent of possible sunshine was 53, or 8 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 29.81 inches, or 0.20 inch below normal. The highest reading was 30.37 inches on the 25th at all reporting stations, with the exception of Verona, and the lowest 28.36 inches at Long Branch on the 6th.

The mean stage of the Delaware River at Phillipsburg was 2.6 feet, and the highest 8.8 feet on the 29th. The mean stage at Trenton was 2.2 feet, 1.9 feet below the normal. The highest was 5.1 feet on the 29th.

A thunderstorm was noted aa Hammonton and Indian Mills on the 22d and at Cape May on the 27th. Sleet occurred on the following dates: 4, 6, 16, 17, 18, 21 and 28. No dense fog was recorded anywhere in the State.

ERRATA.

August 1931. Monthly precipitation at Flemington should be 4.31 inches. September 1931. Lowest temperature should be 48 on the 29th. Monthly precipitation at Plainfield should be 2.68 inches.

COMPARATIVE DATA FOR MARCH

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	**30.4**	66	2	**1.10**	2.29	**0.23**	......	......	......	......	......
1886	37.7	70	9	3.70	5.27	2.59	......	......	......	......	......
1887	37.7	61	8	3.34	5.45	2.19	......	......	......	13	10
1888	32.8	72	0	5.71	8.22	3.75	......	......	......	12	11
1889	40.5	67	19	3.79	6.49	1.98	......	......	......	13	8
1890	37.6	78	0	6.08	7.92	4.14	......	......	......	13	14
1891	37.2	68	4	5.06	8.02	2.05	......	8	10	13	12
1892	34.4	64	6	4.75	7.21	3.11	......	10	12	9	9
1893	37.0	68	6	3.73	6.26	2.36	.....	10	10	11	10
1894	44.2	83	12	1.77	2.65	1.09	......	12	11	8	10
1895	36.7	72	7	3.16	4.66	1.77	4.0	12	8	11	10
1896	34.0	69	−8	5.34	7.38	3.14	13.2	13	8	10	11
1897	40.0	77	18	2.78	4.32	1.55	1.6	11	9	11	10
1898	45.1	77	16	3.33	4.25	2.56	3.0	9	10	12	12
1899	38.6	73	13	6.54	9.58	3.45	5.4	7	10	14	13
1900	35.6	67	−9	3.51	4.96	2.48	7.0	12	12	7	10
1901	39.2	75	−8	4.64	8.07	2.40	0.9	9	10	12	12
1902	43.9	77	0	4.34	7.20	3.16	5.7	12	10	9	11
1903	47.6	79	13	5.13	8.53	3.60	*T.*	11	8	12	10
1904	37.2	72	1	3.43	4.76	2.02	4.5	11	8	12	13
1905	39.8	87	−7	3.95	5.06	2.80	2.6	14	8	9	12
1906	34.4	62	**−15**	5.09	6.77	2.91	11.2	10	9	12	11
1907	41.2	88	−11	3.04	4.38	1.81	11.5	13	10	8	10
1908	41.8	89	7	2.80	4.92	1.06	3.5	11	9	11	12
1909	38.3	74	−6	3.48	4.66	2.31	4.6	12	10	9	13
1910	44.5	88	10	1.22	2.36	0.29	1.1	14	10	7	6
1911	37.6	76	3	3.38	4.50	2.64	5.3	10	12	9	11
1912	36.9	72	3	**7.61**	**9.61**	5.95	6.6	9	11	11	14
1913	44.8	79	1	5.15	7.73	2.47	0.1	10	9	12	12
1914	35.4	75	−6	3.65	6.45	2.02	**20.5**	13	10	8	10
1915	36.1	63	11	1.13	1.65	0.58	7.4	20	7	4	3
1916	31.7	71	−7	3.48	4.96	2.38	19.3	13	8	10	12
1917	38.2	72	0	4.65	7.14	2.28	9.8	12	8	11	13
1918	41.8	82	8	2.06	3.76	0.99	0.7	17	7	7	9
1919	43.2	77	12	5.32	7.40	3.77	1.6	14	7	10	13
1920	39.4	79	−8	3.80	5.36	2.29	5.6	17	5	9	10
1921	**49.1**	**92**	11	3.03	4.65	1.80	*T.*	14	10	7	11
1922	41.1	82	2	4.52	7.10	3.42	3.7	12	6	13	13
1923	38.0	81	−3	4.09	6.73	2.13	6.3	17	6	8	10
1924	38.8	76	5	2.51	5.69	0.80	2.7	16	6	9	8
1925	43.3	80	1	3.47	6.09	1.50	0.3	16	6	9	9
1926	35.1	79	0	2.25	3.15	1.52	0.4	16	9	6	7
1927	41.9	81	9	1.46	2.73	0.78	0.3	14	7	10	10
1928	38.3	82	6	2.84	3.82	1.70	4.9	14	8	9	10
1929	44.9	81	5	3.07	4.92	1.92	0.7	15	6	10	11
1930	40.0	78	9	2.54	3.80	0.44	0.1	16	7	8	7
1931	39.2	64	12	4.14	6.06	2.60	2.0	8	9	14	10
1932	36.6	69	3	5.49	7.70	3.91	2.5	14	6	11	9
Normal	38.5	......	......	3.34	......	......	4.8	12	9	10	11
Extremes	......	92	−15	......	9.61	0.23	......	......	......	......	......

W. B. O. Philadelphia-4-26-32-830.

Climatological Data for March, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	36.2^{c}	−1.9	65	30	11	9†	39	4.42	+0.57	1.92	4.5	7	17	4	10	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	33.8	−2.0	59	30	8	9†	35	4.49	+0.29	2.09	4.0	9	15	7	9	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	3	15	....	3.97	+0.50	2.00	7.4	8	18	5	8	w.	Brice E. Riker.
Dover	Morris	600	48	34.5	−0.7	58	36†	9	9†	32	5.52	+1.53	2.40	3.0	9	9	13	9	...	William C. Harris
Layton	Sussex	480	31	33.4^{e}	−2.2	60^{i}	30	5	9†	39^{l}	4.22	+0.85	1.77	8.5	8	10	9	12	nw.	A. M. Depue.
Long Valley	Morris	520	1	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. N .Dilts.
Newton	Sussex	769	48	33.0	−2.5	60	26	6	9†	35	5.00	+1.43	1.43	5.5	9	8	11	12	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	36.3	−1.8	60	30	13	9†	32	4.96	+1.42	1.81	1.5	10	13	9	9	......	Town Engineer.
Sussex	Sussex	442	37	33.9	−2.4	59	30	8	9	32	4.08	+0.49	1.52	5.8	7	16	4	11	n.	A. J. W. Mowatt
Means and extremes	......	......	....	34.4	−1.9	65	30	3	15	39	4.58	+0.88	2.40	5.0	8	14	7	10	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	36.0	−0.6	69	26	13	9†	42	4.37	+0.43	1.85	......	8	15	3	13	nw.	John Kline.
Canoe Brook	Essex	173	2	34.8	......	61	26	12	10	38	5.23	......	2.30	......	7	15	6	10	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	6.17	+2.43	2.34	......	11	21	2	8	......	Paul Molitor, Sr.
Elizabeth	Union	45	53	38.4	−0.4	65	26	14	9†	36	4.87	+0.65	1.95	0.5	10	18	3	10	nw.	Union County Park Com.
Flemington	Hunterdon	140	§46	36.6	−3.5	58	2†	12	9†	32	4.85	+0.96	2.51	T.	8	19	3	9	nw.	Hiram E. Deats.
Jersey City	Hudson	10	34	37.2	−2.0	63	26	13	10	25	5.38	+1.23	2.61	0.8	10	13	8	10	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	35.7	−3.7	60	3†	11	9†	30	4.92	+0.89	2.34	0.8	11	14	7	10	nw	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	36.6	−1.4	66	2	12	10	36	4.77	+1.18	2.38	0.2	9	18	3	10	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	37.0	−1.8	62	26	13	9†	34	5.42	+1.61	2.54	T.	8	17	5	9	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	4.71	......	2.18	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Vincent A. Messineo.
Plainfield	Union	120	44	36.2	−2.6	64	26	12	9†	35	4.97	+0.70	2.13	0.5	9	13	8	10	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	36.2	......	63	26	13	10	32	4.75	......	2.20	0.5	11	12	7	12	nw.	George P. Kirsten.
Somerville, near	Somerset	70	49	36.6	−1.6	62	26	12	16	37	5.23	+1.27	2.38	0.4	9	15	3	13	nw.	Julius Gerlich.
Verona	Essex	490	6	34.3	......	61	26	11	9	27	5.38	......	2.47	1.7	11	15	7	9	nw.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	3.91	......	1.13	......	8	....	....	....	......	Hackensack Water Co.
New York, N.Y.	......	365	62	37.0	−0.7	61	26	13	10	23	5.52	+1.88	2.68	0.7	10	11	8	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	36.3	−2.0	69	26	11	9†	42	5.00	+1.14	2.61	0.5	9	16	5	10	nw.	
The Southern Interior.																				
Bellplain	Cape May	30	38	38.1^{b}	−3.0	68	3	14	9†	38	5.80	+2.10	......	T.	....	2	9	20	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	49	37.9	−4.4	65	26	14	10	34	7.02	+2.84	1.87	1.2	9	19	3	9	w.	Bennett K. Matlack
Burlington	Burlington	12	§46	39.2	−1.2	66	26	15	10	29	6.95	+3.24	2.20	1.7	11	12	7	12	nw.	Public Service Power Co.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	36.8	......	66	26	13	10	32	6.03	+1.38	2.03	0.5	9	15	5	11	nw.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	37.8	......	67	26	13	9†	38	7.30	+3.71	1.96	3.5	11	21	1	9	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	38	38.0	−2.4	67	26	14	7†	33	5.35	+1.31	1.74	......	6	20	4	7	nw.	S. Elwood Croshaw.
Indian Mills‡‡	Burlington	76	43	38.0	−2.5	66	26	11	16	38	7.35	+3.32	2.61	6.0	8	13	8	10	nw.	James M. Armstrong.
Lakewood	Ocean	54	28	37.2	−2.4	67	26	14	10	37	7.70	+3.72	2.40	2.0	10	16	4	11	nw.	R. W. Holman.
Moorestown	Burlington	......	69	36.5	−2.7	65	26	14	10	32	7.47	+3.71	3.40	5.7	10	15	5	11	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	5.44	+1.95	1.84	3.2	11	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	38.1	......	66	26	15	10	30	5.47	......	2.29	4.2	9	9	8	14	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	37.2	......	64	22	14	9†	40	6.08	+2.61	2.12	......	11	22	1	8	w.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	5.84	......	1.60	1.0	8	14	8	9	w.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	36.2	......	64	3	9	9	38	6.27	......	2.72	......	6	20	3	8	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	36.8	−2.3	64	26	13	10	26	5.59	+2.19	2.61	1.8	11	10	10	11	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	5.88	......	3.02	2.2	12	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	39.4	−0.6	60	23†	10	15	28	6.07	+1.82	1.52'	0.4	8	11	9	11	nw.	John H. Brown.
Philadelphia, Pa	......	117	61	39.4	−1.4	63	26	17	10	24	7.43	+4.04	2.74	5.8	12	7	10	14	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	37.7	−2.4	68	3	9	9	40	6.33	+2.61	3.40	2.4	9	15	5	11	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	38.3	−0.7	64	22	14	10	30	4.65	+0.42	2.10	T.	7	19	6	6	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	38.2	−0.4	61	22	15	10	24	5.81	+2.21	2.01	2.1	10	9	12	10	w.	U. S. Weather Bureau.
Cape May	Cape May	17	48	39.2	−1.6	61	22	18	10	29	4.66	+0.93	2.09	2.1	10	1	18	12	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	36.0	−2.5	63	26	13	9	31	7.13	+2.79	2.50	1.6	12	13	6	12	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	37.4	+0.4	62	26	16	10	19	5.60	+1.56	2.49	0.1	10	8	12	11	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	37.8	−1.0	64	22	14	10	31	5.57	+1.58	2.50	1.2	10	10	11	10	nw.	
For the State	......	......	....	36.7	−1.9	69	26	3	15	42	5.49	+1.40	3.40	2.5	9	14	6	11	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for March, 1932

Stations	Drainage Basin	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
lvidere	Delaware				T.	.07	.97							T.	T.			.55				.06					.55		1.92			.30	4.42
arlotteburg	Passaic						.40	.46										.46				.05	.58				.14		2.09	.03		.28	4.49
lvers Lake	Delaware				T.		.72	.02							T.			.42		T.		.05	.30				.10	T.	2.00			.36	3.97
over	Passaic				.05		1.04	T.							T.			.51				*	.59				.05	.20	2.20			.88	5.52
yton	Delaware						*	.96										.31				.03	.37				.23		1.17			.55	4.22
ng Valley	Morris																																
wton	Delaware				.04		1.08	.50										.40		T.		.05	.30				.20		1.43			1.00	5.00
illipsburg	...do				.02		1.10	.03						T	T.		T.	.66		T.		.08	.38				.12	.24	1.57			.76	4.96
ssex	Hudson						.32	T.										.38		T.		.90	.52				.17		1.52			.27	4.08
The Red Sandstone Plain.																																	
onton ‖	Passaic	T.				.08		1.01	T.									T.	.44		T.		.63	.09				.06	1.85	.21			4.37
noe Brook ‖	Essex					.03		1.47	T.									T.	.55	T.		T.	.60					.12	2.30	.16		T.	5.23
atham ‖	...do	.09				.07		1.55	.14										.71		.03		.43	.18				.19	2.34	.44			6.17
zabeth	Coast				T.	T.	1.05	.33	.03						T.			.64		T.		.01	.58		T.		.12	.01	1.95	T.		.15	4.87
emington	Raritan	.02				T.	.81	.18							T.			.64				.07	.44						2.51			.18	4.85
sey City	Coast				.02		1.19	.10							T.			.71		T.		.04	.51		T.		.10	.01	2.60			.10	5.38
mbertville	Delaware					.02	.78	.35						T.	.02			.52				.03	.50				.15	.01	2.34			.20	4.92
tle Falls. ‖	Passaic	.01				.02		1.08	T.									.01	.45				.59					.03	2.35	.23			4.77
w Brunswick	Raritan					T.	1.20	.31							T.			.57	T.			.03	.56				.12		2.54	T.		.09	5.42
w Milford ‖	Hackensack	.06						1.10										.03	.45				.47	.11				.05	2.18	.26			4.71
terson	Passaic																																
infield	Raritan						*	1.40						T.	T.			.57				*	.65		T.		.10	.03	2.10			.12	4.97
dgefield**	Hackensack				T.		*	.98							T.		.01	.50		.01		.04	.61		T.		.10	*	2.20			.30	4.75
merville	Raritan					.01	1.08	.11										.60				.05	.52				.14		2.38			.34	5.23
rona**	Passaic																																
odcliff Lake ‖	Hackensack	.05						.88											.47				.74	.21				.04	1.13	.39			3.91
w York, N. Y***	Coast				.02		1.30	T.							T.		.02	.69		T.		.05	.50		T.		.10	.53	2.15			.16	5.52
The Southern Interior.																																	
leplain	Tuckahoe																																5.80
dgeton	Coast				.28		1.87	.33							T.			.51				.18	1.58				T.	.43	1.63			.21	7.02
lington	Delaware	.01				.02	.70	.92							T.	T.		1.20	T.			.70	.30				.10	.40	2.20			.40	6.95
yton	...do																																
ehold	Raritan						2.00	.50	.25	T.					T			.61				.05	.30				.18		2.03			.11	6.03
mmonton	Mullica				.01	.01	1.67	.17						T.	T.	T.		.75				.42	1.29				.01	.63	1.96			.38	7.30
htstown	Raritan																																
ian Mills	Mullica					.08	1.40	.59						T								.55	1.60					.22	2.61			.30	7.35
ewood	Metedeconk					.02	2.05	1.00						T.	T.			.70	T.			.23	.95				.10	.05	2.40			.20	7.70
orestown ‖	Delaware							1.95										.06	.71			.35	.57	.09				.18	3.40	.10	.06		7.47
rthfield	Coast				.10	.01	1.05	.27							T.	.01		.50				.24	1.19					.13	1.84			.10	5.44
nberton	Delaware					.06	.85	.37						T.	T.	T.		.69	T.	T.		.32	.58				T.	.11	2.29			.20	5.47
asantville ‖	Coast	.04				.15		1.30						T.	T.			.48	.35			.30	.80	.52				.05	2.07			.02	6.08
t Norris	Maurice				.23		1.33	.46								T.		.44				.05	1.23						1.60			.50	5.84
nyon	Coast						1.75	.57										.52					.61						2.72			.10	6.27
nton***	Delaware				.01		1.22	T.						T.	.02	T.	.03	.63	T.	T.		.13	.39				.20	.54	2.07	T.		.35	5.59
nton No. 2 ‖	...do	T.				.01		1.39	.02					T.	T.	.02		.04	.61	T.		.07	.47	.04				.19	2.81	.21	T.		5.88
kerton	Coast						1 10	.42										.52				*	1.60					.80	1.21			.42	6.07
la., Pa***	Delaware				.03		2.06	.05							.02		.02	.74	T.			.57	.68				.14	.76	1.98	T.		.38	7.43
he Sea Coast.																																	
ury Park	Coast				.02		2.10								T.		T.	1.07	T			T.	.92		T.		.10	.18	T.			.26	4.65
ntic City***	...do				.16		1.50	.11						T.	T.		T.	.45				.33	.97				.01	1.46	.55	T.		.27	5.81
e May	...do				.35		.74	.20							.01			.31				.04	.82				T.	.79	1.30			.10	4.66
g Branch**	...do				.10		2.50	.16							T.		.07	.60		.09		.16	.45		T.		.11	.70	1.88			.31	7.13
dy Hook***	...do	T.			.05		1.67	.01							T.		T	.65		T.		.04	.44		T		.13	.70	1.79			.12	5.60

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
ervation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-
on measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
surement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
ntic City	29.84	30.37	25	28.37	6	19.4	62	ne.	6	72	65	70	50
g Branch	29.81	30.37	25	28.36	6					71	56	60	
restown													
York, N. Y	29.79	30.35	25	28.51	6	20.8	62	nw.	7	62	52	58	64
adelphia, Pa	29.85	30.38	25	28.54	6	15.8	44	ne.	6	61	56	56	53
efield	29.79	30.37	25	28.55	6								
dy Hook	29.79	30.37	25	28.44	6	19.9	53	ne.	6	73	62	72	58
nton	29.82	30.37	25	28.51	6	14.9	46	ne.	6	67	56	62	53
na		30.33	25	28.53	6	10.3	44	w.	7	61	51	56	

Daily Temperatures for March, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	46	55	62	54	59	54	33	29	25	32	40	41	35	37	33	....	35	41	54	48	35	....	56	55	56	58	....	51	50	65	62	46.5°
	Minimum	36	36	28	30	25	32	22	15	11	11	25	22	23	22	14	....	29	31	23	29	24	....	25	30	25	34	....	32	30	26	28	25.8°
Charlotteburg	Maximum	41	55	56	52	54	52	34	28	26	30	34	35	33	32	28	36	37	39	50	49	35	56	47	51	50	58	52	50	42	59	58	43.8
	Minimum	34	33	30	26	27	25	22	15	8	8	20	22	20	17	10	13	26	28	16	27	22	21	26	26	24	26	40	30	27	26	42	23.8
Dover	Maximum	42	56	58	48	56	44	35	29	26	32	39	38	31	33	26	40	35	40	52	45	32	55	48	54	51	58	53	40	45	58	57	43.7
	Minimum	32	33	29	29	29	29	22	16	9	9	22	23	21	15	12	15	28	24	20	28	21	26	26	29	38	30	39	29	28	28	46	25.3
Layton	Maximum	....	....	....	....	....	....	....	....	....	31	36	35	33	34	34	38	38	39	50	46	31	55	48	52	52	57	52	44	44	60	58	44.0
	Minimum	34	35	24	26	28	25	24	15	5	5	22	22	16	16	10	10	26	25	16	27	22	22	21	23	20	29	38	29	28	21	44	22.8
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	40	54	57	36	56	45	35	30	25	31	39	37	33	37	23	42	35	35	49	49	35	56	47	55	52	60	52	42	42	59	57	43.4
	Minimum	32	31	28	25	27	29	19	13	6	6	19	19	18	16	8	12	18	25	24	25	19	21	24	28	22	35	38	25	25	26	34	22.5
Phillipsburg	Maximum	44	54	57	42	56	42	38	28	29	32	40	39	34	35	29	37	37	43	54	45	33	56	48	55	56	59	51	39	50	60	58	44.5
	Minimum	39	38	29	32	32	34	23	17	13	13	27	24	25	22	15	17	30	30	26	31	25	31	28	31	27	34	39	33	32	28	45	28.1
Sussex	Maximum	39	51	52	50	53	49	37	28	28	29	33	34	33	33	27	40	34	37	50	48	35	54	47	54	53	57	51	50	41	59	57	43.3
	Minimum	35	34	27	27	25	28	25	17	8	9	22	24	18	18	12	12	26	27	19	27	22	23	25	27	25	30	39	31	29	27	41	24.5
The Red Sandstone Plain.																																	
Boonton§§	Maximum	53	59	57	40	56	57	35	30	27	33	38	38	27	41	32	38	37	40	55	40	34	64	47	56	51	69	59	58	52	62	67	46.8
	Minimum	34	35	30	28	25	29	26	19	13	13	19	25	19	21	14	17	20	30	20	32	25	22	29	28	25	29	39	34	31	25	26	25.2
Canoe Brook§§	Maximum	48	60	57	44	56	40	29	31	26	36	40	39	35	35	27	40	37	41	53	42	37	56	48	56	55	61	55	46	48	60	58	45.0
	Minimum	34	34	27	26	23	27	24	18	13	12	22	24	17	17	14	16	25	23	18	30	23	23	27	26	21	27	45	36	31	22	41	24.7
Elizabeth	Maximum	47	60	59	54	58	54	41	35	30	36	42	43	39	38	32	43	42	42	55	57	40	60	52	56	50	65	56	52	49	63	60	48.7
	Minimum	35	37	33	33	31	33	25	19	14	14	26	26	25	19	15	18	30	30	24	32	25	27	28	30	30	34	44	34	32	27	42	28.1
Flemington	Maximum	47	58	53	53	54	54	38	33	32	35	40	46	36	39	32	43	35	45	51	51	43	58	45	54	54	54	54	50	47	54	58	46.6
	Minimum	37	35	29	31	29	31	23	16	12	12	25	23	22	21	14	14	29	30	22	30	24	26	26	27	25	30	45	34	31	26	42	26.5
Jersey City	Maximum	45	54	54	42	55	46	39	32	29	35	42	42	35	35	27	40	40	42	53	46	36	57	49	52	49	63	54	50	47	60	57	45.4
	Minimum	36	36	34	32	32	33	27	19	14	13	26	25	26	20	15	18	29	30	31	30	25	32	31	34	30	44	40	36	33	35	37	29.1
Lambertville	Maximum	45	58	60	55	56	44	35	27	25	31	40	38	31	35	29	39	35	41	54	44	37	37	49	55	57	60	53	53	48	58	57	44.7
	Minimum	36	33	32	30	30	33	20	15	11	11	24	22	24	20	13	14	27	29	28	28	24	24	28	28	27	35	45	32	31	28	47	26.7
Little Falls§§	Maximum	48	66	58	43	61	43	38	34	30	36	42	42	25	37	39	42	37	43	55	44	37	59	51	54	52	63	55	47	49	62	60	46.8
	Minimum	35	35	30	30	28	30	25	19	13	12	20	24	22	20	14	16	24	26	22	30	26	23	29	29	26	30	44	35	31	27	45	26.5
New Brunswick	Maximum	45	58	57	51	55	54	44	33	27	31	40	39	37	33	29	39	37	40	54	51	39	58	48	55	50	62	54	48	48	60	58	46.3
	Minimum	37	36	33	31	31	32	23	17	13	13	25	23	24	19	14	15	28	29	24	31	24	26	29	30	27	37	46	34	32	26	47	27.6
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	45	54	55	43	55	47	38	30	28	32	41	41	34	35	28	41	40	42	55	46	36	58	50	52	50	64	54	50	47	60	57	45.4
	Minimum	30	35	33	32	30	34	26	16	12	12	25	24	26	20	14	15	28	29	22	30	24	29	28	29	27	37	41	37	31	25	34	26.9
Ridgefield	Maximum	46	58	55	41	56	41	36	31	28	34	41	40	32	34	27	41	35	42	53	43	30	58	50	54	49	63	53	42	49	62	56	44.5
	Minimum	35	37	33	30	29	35	26	19	14	13	25	25	24	17	14	16	30	29	29	30	24	29	29	34	29	42	39	31	32	30	37	27.9
Somerville	Maximum	48	59	60	45	59	45	38	31	29	35	45	43	37	38	32	44	36	44	56	48	36	59	51	58	55	62	55	49	51	61	59	47.4
	Minimum	37	34	27	29	27	30	24	17	13	13	26	20	20	19	14	12	29	27	21	30	25	27	25	26	24	32	44	34	31	24	41	25.9
Verona	Maximum	42	55	53	33	52	39	36	29	25	32	37	37	32	33	25	38	34	38	52	45	28	55	47	52	48	61	51	37	45	53	57	42.1
	Minimum	36	35	32	30	28	32	23	18	11	12	23	25	22	15	13	15	28	28	28	18	22	28	28	32	28	40	36	30	30	30	47	26.5
New York, N. Y.	Maximum	44	54	54	42	55	46	38	32	28	35	41	41	34	35	26	39	40	42	52	45	35	56	48	51	48	51	54	50	46	59	56	44.7
	Minimum	36	36	34	32	32	34	25	19	14	13	26	26	24	17	15	19	30	30	34	30	26	33	31	36	30	46	40	33	33	36	38	29.3
The Southern Interior.																																	
Belleplain	Maximum	52	58	68	41	53	51	47	51	28	31	38	51	35	37	30	38	....	51	60	54	41	65	51	57	55	54	59	53	59	58	....	49.2^b
	Minimum	36	35	31	32	35	30	20	17	14	14	24	21	20	20	16	15	....	21	22	38	28	35	27	28	23	42	36	34	22	48	....	27.0^b
Bridgeton	Maximum	52	57	58	39	57	45	34	30	28	32	38	40	33	37	30	37	44	44	60	56	40	62	51	58	57	65	55	56	53	59	60	47.3
	Minimum	36	34	33	35	33	31	20	16	17	14	24	23	24	22	17	17	29	30	26	36	27	33	29	30	29	42	42	35	32	28	39	28.5
Burlington	Maximum	50	57	58	56	57	55	38	33	32	32	38	40	37	34	35	40	37	42	55	55	45	56	50	57	59	66	56	50	52	59	59	48.1
	Minimum	38	36	33	35	33	38	22	18	16	15	27	25	26	24	17	18	28	30	32	33	25	30	29	29	30	43	45	37	37	36	52	30.2
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	46	60	57	44	55	44	39	29	27	32	40	39	33	35	28	40	37	41	53	51	38	59	48	56	52	66	57	52	48	61	58	46.0
	Minimum	33	34	29	32	29	32	22	17	14	13	25	23	22	19	15	15	27	28	26	31	26	31	29	32	27	40	43	35	32	29	46	27.6
Hammonton	Maximum	53	59	60	46	57	47	41	35	28	39	40	41	35	38	37	41	41	45	48	59	36	61	51	60	60	67	54	58	53	61	59	48.7
	Minimum	36	34	28	32	32	30	18	14	13	13	23	23	21	18	15	14	29	25	32	32	29	32	27	23	25	44	39	34	32	23	44	26.9
Hightstown	Maximum	51	64	60	45	60	48	40	33	28	41	45	40	34	36	33	40	38	54	54	44	47	60	50	60	56	67	52	54	51	66	64	48.9
	Minimum	33	30	33	32	37	26	14	14	14	23	23	23	20	15	15	26	28	26	30	26	26	27	30	27	40	47	33	40	27	45	34	27.9
Indian Mills	Maximum	49	56	57	54	55	53	44	30	30	33	40	40	36	37	31	40	40	42	58	56	40	59	50	59	58	66	56	57	51	61	58	48.3
	Minimum	37	35	32	33	33	30	21	17	15	12	25	24	26	17	16	11	30	27	22	34	26	31	27	28	26	43	46	35	33	23	46	27.8
Lakewood	Maximum	48	61	57	42	52	45	45	30	27	33	41	40	35	35	30	39	38	42	55	54	40	59	48	52	47	67	53	60	51	62	57	46.6
	Minimum	38	37	32	29	31	30	23	18	15	14	26	24	23	19	15	16	30	27	21	33	27	28	28	29	25	41	43	35	33	25	48	27.8
Moorestown	Maximum	49	56	59	43	55	43	30	29	27	32	38	38	32	36	29	39	36	41	55	44	34	55	49	58	58	65	51	48	50	59	59	45.1
	Minimum	38	35	31	34	32	30	20	16	15	14	26	24	24	19	16	17	32	28	28	32	23	34	29	29	29	42	40	32	31	27	39	27.9
Pemberton	Maximum	47	58	56	51	54	52	40	28	26	33	40	39	34	35	31	37	38	41	56	52	35	56	49	57	57	66	54	57	51	59	58	46.7
	Minimum	38	35	33	34	34	35	23	18	16	15	26	25	24	21	16	17	30	28	26	34	26	32	29	31	28	46	48	35	34	29	48	29.5
Pleasantville§§	Maximum	49	58	49	43	51	54	44	31	28	33	39	42	35	38	30	42	48	43	60	48	52	64	53	51	49	51	56	56	54	55	57	47.2
	Minimum	37	37	32	34	34	34	20	17	14	14	21	20	20	17	17	14	24	25	20	37	28	31	25	29	23	38	38	41	34	21	44	27.1
Runyon	Maximum	48	62	64	58	60	38	34	30	28	36	43	42	39	44	38	41	38	54	52	40	34	42	52	58	62	58	44	44	62	54	54	46.9
	Minimum	34	35	38	38	34	34	24	18	9	14	26	19	15	18	13	14	36	24	22	15	18	28	20	22	24	36	34	32	26	24	44	25.4
Trenton	Maximum	45	58	58	42	56	44	32	28	26	30	38	38	31	34	29	39	40	42	54	43	34	56	49	57	58	64	53	44	49	60	59	44.8
	Minimum	39	36	35	33	34	32	21	16	14	13	26	25	24	18	15	16	31	32	30	32	24	32	30	34	32	45	39	33	33	34	37	28.9
Tuckerton	Maximum	57	59	50	55	55	45	45	36	40	46	50	51	42	40	35	45	48	45	58	59	50	45	60	50	55	50	58	60	60	51	45	49.8
	Minimum	32	35	36	35	38	35	26	15	15	20	25	26	28	15	10	25	32	32	32	38	32	25	35	30	28	35	38	35	32	35	25	29.0
Philadelphia, Pa.	Maximum	50	56	59	45	56	44	31	31	28	33	38	40	33	35	30	38	40	43	53	50	37	57	50	57	60	63	57	51	52	60	60	46.5
	Minimum	40	39	40	38	38	30	23	19	18	17	29	27	28	23	19	21	35	36	34	36	28	36	34	38	37	47	42	35	37	39	41	32.4
The Sea Coast.																																	
Asbury Park	Maximum	50	58	49	41	47	49	44	36	30	35	45	41	36	36	31	41	37	44	58	52	38	64	49	50	47	54	54	60	52	50	57	46.3
	Minimum	38	38	36	36	33	39	21	18	16	14	26	26	24	21	16	17	30	31	30	34	27	34	30	35	38	42	42	34	34	34	44	30.3
Atlantic City	Maximum	48	58	46	43	47	51	31	31	27	33	40	42	34	35	29	39	44	45	54	54	40	61	51	49	49	52	56	57	52	50	54	45.2
	Minimum	39	38	36	35	36	30	21	18	17	15	25	25	25	23	18	18	35	32	35	37	30	37	33	37	36	44	42	37	35	36	46	31.3
Cape May	Maximum	50	54	52	44	53	50	32	33	29	33	38	40	36	38	31	39	50	44	60	50	42	61	52	53	53	54	56	54	53	53	53	46.5
	Minimum	39	38	36	36	37	29	24	20	19	18	27	27	26	25	21	22	35	30	31	40	34	37	33	34	31	43	44	38	36	33	43	31.8
Long Branch	Maximum	46	54	56	43	58	43	33	29	26	32	40	37	42	23	27	37	36	39	52	47	36	60	50	56	50	63	56	54	50	61	58	45.3
	Minimum	30	31	30	30	29	31	21	19	13	15	24	24	23	20	17	17	28	25	24	28	24	30	31	30	28	40	39	30	30	30	36	26.7
Sandy Hook	Maximum	41	52	51	43	52	43	39	30	27	33	40	39	34	34	28	39	37	40	50	43	36	53	46	48	46	62	50	52	47	55	56	43.5
	Minimum	39	39	38	36	35	36	27	21	17	16	28	28	26	21	17	21	30	32	32	33	26	36	33	36	35	45	41	35	35	36	42	31.4

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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UNIVERSITY OF ILLINOIS

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. APRIL, 1932. No. 4.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The temperature pursued a rather even course throughout the month, the main exceptions being during the 21st-23d when it was warm and on the 13th and 27th when it was quite cool; the average for the month was a little below normal. Highest temperatures occurred generally on the 21st and 22d and were in the high seventies and low eighties, while the lowest were in the low thirties along the Seacoast and in the twenties over the remainder of the State and were registered mostly on the 4th and 5th. Killing frosts at a number of stations were observed on various dates, most of them occurring about a week or ten days later than the average date for Spring.

There were comparatively few rainy days, the average number of seven being smaller than for any April during the present century. However, the average amount for the State was 75% of the normal, with a few stations having more than the normal amount. In the Highlands section the amount was 52% of the normal, with 70% in the Red Sandstone Plain and 85% in the Southern Interior. The main dates of occurrence were the 1st, 9-12th, and 25-27th. Snow flurries of inappreciable amounts occurred over most of the State on the 13th; in the Highlands there was a fall of about one to two inches during the 27-28th.

The month was comparatively windy, yet there were no cases in which the wind attained destructive velocities.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 48.3°, which was 1.1° below normal. The highest temperature was 82° at 5 stations scattered throughout the State on the 21st and 22d, and the lowest, 18°, at Charlotteburg and Layton on the 5th. The greatest daily range of temperature was 51° at Sussex on the 21st. The highest monthly mean temperature was 50.9° at Burlington, and the lowest, 44.5° at Layton.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +3.8°; Red Sandstone Plain, +3.6°; Southern Interior, +4.0°; Sea Coast, +3.9°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 2.71 inches, which was 0.89 inch below normal. The average total snowfall at 20 selected stations was 0.1 inch. The greatest monthly precipitation was 4.69 inches, at Long Branch, and the least, 1.16 inches at Phillipsburg. The greatest amount of precipitation in any 24 consecutive hours was 2.69 inches at Atlantic City on 9-10th. The mean of the number of days on which 0.01 inch or more precipitation fell was 7, or 3 less than normal.

The precipitation accumulated departure from the normal for the year, 1932, to date, by sections, is: The Highlands, —1.36 inches; Red Sandstone Plain, —0.18 inch; Southern Interior, +1.56 inches; Sea Coast, +0.57 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 15 miles per hour, which was 2 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 46 miles per hour from the northeast at Atlantic City on the 10th.

MISCELLANEOUS.

The per cent of possible sunshine was 63, or 6 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.95 inches, or 0.05 inch below normal. The highest reading was 30.48 inches at Trenton on the 4th, and the lowest 29.29 inches at Sandy Hook on the 12th.

The mean stage of the Delaware River at Phillipsburg was 6.3 feet, and the highest 11.4 feet on the 2d. The mean stage at Trenton was 3.7 feet, 0.2 foot below the normal. The highest was 8.0 feet on the 3d.

Light hail fell at Dover on the 27th. Light and heavy frosts occurred on numerous days throughout the month. Killing frosts were noted as late as the 29th in the greater part of the northern half of the State. In the southern interior of the State it occurred as late as the 24th. Thunderstorms occurred on the 6th at Elizabeth, on the 8th at Hammonton and quite generally throughout the State on the 26th and 27th.

ERRATA.

March 1932. Hightstown mean temperature should be 38.4° and departure from normal −2.0°, the mean maximum should be 48.9°. The temperature departure in the Southern Interior should be −2.3°.

COMPARATIVE DATA FOR APRIL

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	48.4	88	26	2.79	2.86	0.89					
1886	50.6	86	27	3.40	5.48	1.86	......	......	......	......	......
1887	47.3	87	16	2.70	3.77	0.91	......	......	......	......	......
1888	47.9	92	22	3.28	4.68	1.89	......	......	......	12	7
1889	51.2	83	25	5.32	7.25	2.92	......	......	......	6	9
1890	50.4	86	21	2.65	4.58	1.89	......	......	......	14	12
1891	52.0	88	20	2.19	3.80	1.39	......	......	......	7	8
1892	49.3	87	19	2.49	4.41	1.05	. ..	13	11	6	8
1893	49.2	82	19	5.21	7.12	2.97	......	9	13	8	8
1894	50.3	88	10	3.09	4.86	1.71	......	9	10	12	11
1895	49.1	89	19	4.88	7.75	3.47	... ..	12	9	9	9
1896	52.4	**98**	12	**1.35**	2.30	0.64	T.	11	7	12	10
1897	50.4	89	19	3.79	6.98	2.17	3.1	13	10	7	7
1898	47.8	81	13	3.74	4.94	2.17	T.	14	11	5	9
1899	49.9	88	18	1.73	3.25	**0.48**	2.9	8	11	11	11
1900	50.8	82	18	2.29	3.03	1.59	T.	16	10	4	4
1901	48.3	89	23	6.31	**10.22**	3.46	T.	14	9	7	6
1902	50.2	93	20	3.62	5.99	2.45	0	8	7	15	12
1903	50.9	92	18	3.97	7.03	2.40	0	10	11	9	9
1904	46.7	85	16	3.42	4.71	2.00	0	13	7	10	9
1905	49.9	84	18	2.88	4.03	1.53	0.1	9	12	9	10
1906	51.2	87	17	3.64	6.42	1.17	0.1	12	11	7	10
1907	**45.2**	83	19	3.78	8.67	2.06	T.	15	10	5	8
1908	51.2	93	13	2.72	3.86	1.42	4.8	11	9	10	11
1909	50.2	88	17	5.97	8.90	3.84	T.	14	9	7	11
1910	53.5	88	20	5.34	7.56	3.43	0.8	10	11	9	13
1911	47.4	88	14	4.11	5.58	2.87	0	9	11	10	12
1912	50.4	82	18	3.56	6.02	1.81	2.6	10	10	10	11
1913	52.1	89	19	5.78	8.53	4.14	0	9	10	11	14
1914	48.4	89	16	3.67	4.78	2.35	T.	14	7	9	11
1915	54.4	96	20	2.71	4.13	1.28	0	13	10	7	11
1916	48.2	85	21	3.32	6.14	0.90	**11.5**	14	10	6	9
1917	48.8	88	21	2.39	3.54	1.19	4.4	10	9	11	13
1918	49.8	81	22	4.05	5.79	2.88	4.7	15	8	7	9
1919	49.3	85	15	3.06	4.79	2.20	2.6	11	8	11	12
1920	48.0	85	13	4.50	6.06	2.90	T.	13	7	10	10
1921	**56.3**	87	20	3.57	5.20	1.86	T.	12	9	9	13
1922	51.0	89	18	2.55	4.12	1.57	0.4	13	6	11	11
1923	50.0	91	**3**	3.55	6.59	2.27	T.	15	7	8	10
1924	48.0	81	18	6.15	9.23	4.74	0.5	16	6	8	9
1925	51.4	88	15	2.40	3.35	1.31	6.6	15	6	9	11
1926	46.4	87	14	2.05	2.97	1.39	0	15	7	8	9
1927	47.5	93	17	2.42	3.97	1.00	T.	13	10	7	8
1928	47.4	85	16	5.26	7.16	3.82	0.3	14	7	9	9
1929	51.1	94	25	**6.43**	8.74	4.63	0.9	12	8	10	12
1930	47.6	79	18	2.34	3.72	0.50	T.	10	5	15	15
1931	49.8	80	20	2.85	5.17	1.53	T.	13	7	10	9
1932	48.3	82	18	2.71	4.69	1.16	T.	15	6	9	9
Normal	49.4	......	......	3.76	......	......	1.3	12	9	9	10
Extremes	......	98	3	......	10.22	0.48	......	......	......	......	......

W. B. O. Philadelphia 5-24-32-830.

Climatological Data for Apail, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	48.8	−1.0	82	22	26	5	46	1.87	−1.79	0.80	T.	8	18	5	7		Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40.	46.0	−0.8	76	22	18	5	43	2.34	−1.98	0.60	1.0	8	22	3	5	nw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31					23	4		1.77	−2.05	0.45	1.6	7	16	5	9	nw.	Brice E. Riker.
Dover	Morris	600	48	46.2	−1.2	80	22	22	5	43	1.74	−2.02	0.59	T.	10	8	14	8		William C. Harris
Layton	Sussex	480	31	44.5	−2.7	79	22	18	5	50	1.51	−2.10	0.39	2.5	7	11	3	16	nw.	A. M. Depue.
Long Valley	Morris	520	1																	S. N .Dilts.
Newton	Sussex	769	48	45.8	−2.2	81	30	23	5	40	1.66	−1.71	0.50	T.	8	13	3	14	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	48.6	−1.3	81	22	27	5	42	1.16	−2.10	0.71	T	6	15	10	5		Town Engineer.
Sussex	Sussex	442	37	46.3	−2.3	82	21	25	5†	51	3.13	−0.31	1.65	T.	8	14	6	10	n.	A. J. W. Mowatt
Means and extremes				46.6	−1.6	82	21†	18	5	51	1.90	−1.76	1.77	0.6	8	15	6	9	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	47.4	−1.3	82	22	23	5	42	2.49	−1.50	0.81		7	17	2	11	nw.	John Kline.
Canoe Brook	Essex	173	2	46.4		78	22	21	5	46	2.77		0.92		7	15	10	5	w.	N. J. Water Policy Comm.
Chatham	Morris	185	28								3.64	−0.46	1.02		11	21	3	6		Paul Molitor. Sr.
Elizabeth	Union	45	53	50.2	−0.6	81	22	28	5†	40	3.01	−0.67	1.01	T.	10	16	9	5	nw.	Union County Park Com.
Flemington	Hunterdon	140	§46	47.5	−2.9	76	22†	25	5	40	2.30	−1.22	0.67	0	8	21	4	5	nw.	Hiram E. Deats.
Jersey City	Hudson	10	34	49.2	−0.8	79	22	31	4†	35	3.10	−1.06	1.00	T.	7	13	12	5	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	48.4	−2.3	79	22	28	4†	34	2.40	−1.18	0.96	T.	8	18	3	9	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	48.4	−1.5	82	22	24	24	42	3.42	−0.70	1.15	T.	7	18	6	6	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	49.3	−0.3	78	22	28	15	37	1.97	−1.77	0.83	T.	8	19	6	5	nw.	N. J. Experiment Station
New Milford‡‡	Bergen		14								2.85		1.10		8					Hackensack Water Co
Paterson	Passaic	80	61																	Vincent A. Messineo.
Plainfield	Union	120	44	47.9	−1.7	81	22	25	5†	40	3.02	−0.88	1.00	T.	6	11	11	8	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	47.8		78	22	29	5	38	1.95		1.14	T.	7	12	6	12	nw.	George P. Kirsten.
Somerville, near	Somerset	70	49	48.3	−1.2	81	22	23	5	44	1.86	−1.63	0.70	T.	6	11	6	13	nw.	Julius Gerlich.
Verona	Essex	490	6																	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	14								2.57		0.98		7					Hackensack Water Co.
New York, N. Y.		365	62	48.4	−1.0	75	22	31	13	34	2.69	−0.54	0.98	T.	6	9	13	8	nw.	U. S. Weather Bureau.
Means and extremes				48.3	−1.4	82	22	21	5	46	2.67	−1.11	1.14	T.	8	16	7	7	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	48.5b	−2.1	79	22	23	5	42	2.60	−1.05	1.55	0	4	12	3	15	nw	A. F. Waldron.
Bridgeton	Cumberland	30	49	50.3	−2.4	79	22	29	4†	38	2.06	−1.46	0.63	0	10	18	5	7	w.	Bennett K. Matlack
Burlington	Burlington	12	§46	50.9	−0.9	79	22†	29	5	39	2.36	−1.34	1.75	T.	6	14	8	8	nw.	Public Service Power Co.
Clayton	Gloucester	134	32	49.1	−2.1	79	21	28	5†	38	1.54	−1.94	0.40	T.	7	20	5	5	nw.	G. E. Lamb.
Freehold	Monmouth	194	¶27	49.4		78	22	28	15	36	3.14	−0.50	1.25	T.	8	19	4	7	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	49.0		78	29	25	5	42	2.67	−1.25	1.45	0	8	20	4	6	w.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	38																	S. Elwood Croshaw.
Indian Mills‡‡	Burlington	76	43	49.8	−0.5	80	29	25	15	44	3.69	+0.26	2.08	0	7	14	11	5	nw.	James M. Armstrong.
Lakewood	Ocean	54	28	49.0	−0.4	75	26†	24	5	37	3.99	+0.32	2.30	T.	6	13	9	8	nw.	R. W. Holman.
Moorestown	Burlington		69	48.6	−1.8	78	22	29	4†	37	3.30	+0.01	1.10	T.	7	15	7	8	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25								3.58	+0.12	2.00	0	8					William L. Flick.
Pemberton	Burlington	55	2	50.3		79	22	28	5	39	2.89		1.62	T.	8	15	4	11	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	48.6		78	3	23	5	38	4.31	+0.96	1.42		9	24	2	4	nw.	N. J. Water Policy Comm.
Port Norris	Cumberland	10									1.80		0.66	0	6	17	6	7	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	48.2		82	22	19	5†	49	2.41		0.96		7	19	8	3	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	49.2	−0.6	78	22	30	4	35	2.25	−0.69	1.33	T.	7	8	14	8	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7								3.06		1.03	T.	7					Edward H. Ristow.
Tuckerton	Ocean	23	39	48.6	−0.7	76	22	25	1†	36	3.83	+0.09	2.25	0	7	7	11	12	nw.	John H. Brown.
Philadelphia, Pa		117	61	52.0	−0.1	79	22	33	4	34	2.37	−0.68	1.51	T.	8	8	12	10	nw.	U. S. Weather Bureau.
Means and extremes				49.2	−1.3	82	22	19	5†	49	2.91	−0.50	2.30	T.	7	15	7	8	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	48.8	+0.3	73	3	32	17	31	3.35	−0.34	2.10	T.	6	23	5	2	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	49.0	+1.2	78	23	31	4	28	4.31	+1.32	2.69	0	9	12	10	8	w.	U. S. Weather Bureau.
Cape May	Cape May	17	48	50.0	+1.6	77	23	32	4	36	2.63	−0.36	0.83	0	9	3	17	10	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	45.0	−3.1	73	3	27	5	38	4.69	+0.14	1.76	T.	5	15	8	7	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	48.1	+1.1	71	22	35	4	29	2.27	−1.35	0.96	T.	9	11	11	8	nw.	U. S. Weather Bureau.
Means and extremes				48.2	+0.2	78	23	27	5	38	3.45	−0.12	2.69	T.	8	13	10	7	nw.	
For the State				48.3	−1.1	82	21†	18	5	51	2.71	−0.89	2.69	0.1	7	15	7	8	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for April, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.20			T.				.02	.18	.80	.15	.15	.02												T.	.35	T.					1.87
Charlotteburg	Passaic	.54								.11	.35	.40	.60														.11	.19	.04				2.34
Culvers Lake	Delaware	.35							T.	.08	.28	.25	.30	T.												T.	.45	T.	.06				1.77
Dover	Passaic		.01			.01			.04	*	.55	.22	.59	T.												.05	.22	.05					1.74
Layton	Delaware								.03	.19	.39	.27	.20														.15	T.	.28				1.51
Long Valley	Morris																																
Newton	Delaware	.50							.06	.09	.06	.20	.45	T.													.22	T.	.08				1.66
Phillipsburg	...do	T.	T.						.02	.17	.71	.08	.12	T.												T.	.06	T.			T.		1.16
Sussex	Hudson	.33							.01	.11	.24	.23	.52													T.	.04	1.65					3.13
The Red Sandstone Plain.																																	
Boonton ‖	Passaic	.58								.03	.48	.27	.81	T.													T.	.25	.07				2.49
Canoe Brook ‖	Essex	.60					T.			.05	.47	.41	.92	T.													.11	.21	T.				2.77
Chatham ‖	...do	.73					.23			.19	.43	.52	1.02	.04	.03												.08	.28	.09				3.64
Elizabeth	Coast	.29	.01				.05		T.	.06	.76	.22	1.01	T.												.01	.12	.48	T.				3.01
Flemington	Raritan	.43	.02			T			T.	.08	.67	.12	.38	T.												.02	.58						2.30
Jersey City	Coast	.40	T.			T.			T.	.03	1.00	.36	.81	T.												T.	.20	.30					3.10
Lambertville	Delaware	.29	.08						T.	.10	.96	.11	.42	T												.04	.40						2.40
Little Falls ‖	Passaic	.55								.04	.58	.65	1.15														T.	.39	.06				3.42
New Brunswick	Raritan	.19							T.	.04	.53	.13	.83	T.												.01	.17	.07					1.97
New Milford ‖	Hackensack	.58								.04	.42	.44	1.10														.05	.19	.03				2.85
Paterson	Passaic																																
Plainfield	Raritan	.58				T.				.02	.68	1.00	.13	T.				T								T.	.61	T.					3.02
Ridgefield**	Hackensack	.04	T.			T.		T.	.05	T.	.65	.93	.21	T												.01	.06	T.					1.95
Somerville	Raritan	.10	T.				T.				.57	.13	.52	T.												.08	.46						1.86
Verona**	Passaic																																
Woodcliff Lake ‖	Hackensack	.49								.06	.38	.42	.98														.02	.22					2.57
New York, N. Y***	Coast	T.	T.			T.			.01	.12	.93	.47	.64	T.												T.	.52	T.			T.		2.69
The Southern Interior.																																	
Belleplain	Tuckahoe		T.							1.55	.10															.90	.05						2.60
Bridgeton	Coast	.37	.06				.02		T.	.19	.63	.06	.28													.08	.34	.03					2.06
Burlington	Delaware	.15	.03								1.75	.04	.11	T.												T.	.28						2.36
Clayton	...do								.04	.10	.30	.40	.30	T.												.32	.08						1.54
Freehold	Raritan	.18							T.	.06	1.25	.26	1.13	T.												.01	.23	.02					3.14
Hammonton	Mullica	.17	.05							.07	1.45	.05	.60													.02	.26	T.					2.67
Hightstown	Raritan																																
Indian Mills	Mullica	.38	.05						T.	.12	2.08	.10	.66													T	.30						3.69
Lakewood	Metedeconk	.18	T.						T.	.02	2.30	.43	.90	T												T.	.16						3.99
Moorestown ‖	Delaware	.24	.05							.14	1.02	1.10		T.													.45	.30					3.30
Northfield	Coast	.12	T.							.18	2.00	.07	1.03													.09	.24	.05					3.58
Pemberton	Delaware	.17	.02							.09	1.62	.09	.67	T.												T.	.22	.01					2.89
Pleasantville ‖	Coast	.30	T.	T.			.01			.01	1.42	1.08	1.14													.04	.14	.17					4.31
Port Norris	Maurice									.10	.66	.05	.47													.07	.45						1.80
Runyon	Coast	.21								.10	.63	.23	.96														.18	.10					2.41
Trenton***	Delaware	T.	T.			T.			.04	.26	1.10	.23	.29	T.												.02	.31	T.			T.		2.25
Trenton No. 2 ‖	...do	.53	T.	T.			T.			.04	.64	1.03	.44		T.											T.	.08	.30					3.06
Tuckerton	Coast		.04						.15	2.25	1.10	.20													.01	.08							3.83
Phila., Pa***	Delaware	T.	.05			T.			.09	.52	1.14	.17	.11	T.												.02	.27	T.			T.		2.37
The Sea Coast.																																	
Asbury Park	Coast	.12	T.			T.			T.	.02	2.10	.20	.87	T.												T.	.04						3.35
Atlantic City***	...do	.03	.01			T.			T.	.46	2.25	.82	.39													.11	.21	.03					4.31
Cape May	...do	.22	.05			T.	T.		T.	.11	.67	.08	.81													.17	.44	.08					2.63
Long Branch**	...do			T.		T.			T.	.19	1.76	1.66	.78	T.												T.	.30	T.			T.		4.69
Sandy Hook***	...do	.01	T.			.02			.01	.10	93	.38	.60	T.												.01	.21	T.					2.27

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.97	30.45	4	29.35	11	16.8	46	ne.	10	71	63	69	63
Long Branch	29.95	30.45	4	29.33	12					66	50	58	
New York, N. Y	29.93	30.45	4	29.31	12	17.0	56	nw.	17	60	50	57	65
Philadelphia, Pa	29.97	30.50	4	29.38	12	14.3	42	nw.	3	60	44	49	67
Ridgefield	29.93	30.44	4	29.31	12								
Sandy Hook	29.93	30.44	4	29.29	12	16.0	45	n.	17	70	56	68	65
Trenton	29.95	30.48	4	29.34	12	12.8	34	nw.	17	67	52	58	62
Verona													

Daily Temperatures for April, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	58	66	68	55	61	55	68	64	59	47	47	50	42	51	55	55	45	56	48	78	78	82	73	61	56	74	60	67	77	76	....	61.1
	Minimum	32	31	44	28	26	34	38	42	42	42	36	40	30	33	27	27	32	40	35	32	35	40	47	33	44	47	37	38	35	46	....	36.4
Charlotteburg	Maximum	57	63	56	57	57	55	62	63	50	45	45	48	45	45	48	52	46	52	63	73	72	76	75	61	58	70	71	58	72	74	....	59.3
	Minimum	30	26	49	26	18	29	33	32	38	38	33	39	26	32	26	24	28	35	33	31	32	38	45	32	38	43	30	31	29	38	....	32.7
Dover	Maximum	51	63	69	53	57	58	65	55	45	44	45	48	38	48	52	54	44	58	67	76	76	80	67	60	51	71	58	62	74	73	....	58.7
	Minimum	31	31	35	27	22	32	32	38	39	39	35	36	28	32	26	25	30	37	33	33	36	42	41	31	41	45	35	33	34	33	....	33.7
Layton	Maximum	57	65	62	50	60	54	66	60	49	47	48	46	42	48	50	56	43	53	65	73	77	79	64	54	51	70	50	61	74	74	....	58.1
	Minimum	30	27	35	24	18	26	34	35	40	40	36	35	28	32	25	24	30	35	33	23	27	30	42	20	32	38	32	30	26	41	....	30.9
Long Valley	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Newton	Maximum	44	63	69	50	59	55	63	56	44	47	45	48	38	48	50	52	42	53	65	75	74	78	78	59	52	72	51	63	78	81	....	58.4
	Minimum	28	30	32	24	23	34	33	39	37	37	32	34	25	30	27	27	27	35	33	34	40	44	43	27	39	40	30	30	38	43	....	33.2
Phillipsburg	Maximum	48	64	69	54	61	57	65	55	46	46	46	50	41	54	56	56	49	57	68	75	77	81	70	61	57	74	55	68	77	77	....	60.5
	Minimum	33	31	36	30	27	35	38	41	42	41	37	38	32	36	29	28	33	40	35	33	37	40	43	33	46	49	38	37	35	45	....	36.6
Sussex	Maximum	58	64	62	48	60	55	64	61	52	47	47	49	40	46	49	50	40	53	65	76	82	79	65	70	54	74	68	62	77	75	....	59.7
	Minimum	32	29	40	27	25	32	35	36	40	39	35	38	28	32	25	25	30	36	31	28	31	34	39	27	34	43	34	33	30	40	....	32.9
The Red Sandstone Plain.																																	
Boonton§§	Maximum	46	67	77	55	54	67	65	55	45	47	44	54	44	50	53	67	53	57	67	74	75	82	71	59	53	79	49	61	73	59	....	60.1
	Minimum	33	32	38	30	23	30	35	35	40	39	35	37	31	33	26	28	32	36	32	34	35	40	51	33	33	44	37	31	34	41	....	34.6
Canoe Brook§§	Maximum	46	65	70	63	54	60	64	55	53	45	47	51	47	51	51	54	51	58	65	73	72	78	70	65	54	73	50	62	73	75	....	59.8
	Minimum	33	30	42	30	21	30	34	33	41	39	36	39	29	30	23	22	32	37	30	27	31	32	38	26	39	46	37	29	30	40	....	32.9
Elizabeth	Maximum	59	67	73	62	53	63	65	64	46	46	46	56	48	53	52	56	50	63	67	75	72	81	80	65	61	75	72	65	76	77	....	62.9
	Minimum	34	31	48	32	28	36	37	39	42	40	37	40	31	32	28	29	33	39	35	35	41	43	47	36	47	49	39	34	38	47	....	37.6
Flemington	Maximum	48	65	72	54	51	50	62	62	49	46	46	46	43	50	50	51	52	55	60	69	71	76	76	62	59	71	59	72	75	75	....	59.2
	Minimum	32	30	50	29	25	34	37	26	41	40	36	40	31	34	26	27	31	38	32	34	41	38	46	33	45	47	38	35	35	44	....	35.8
Jersey City	Maximum	50	60	69	53	50	62	64	55	51	48	53	52	41	52	52	56	45	59	66	72	71	79	69	61	54	72	50	64	73	71	....	59.1
	Minimum	34	37	34	31	33	39	37	40	40	39	39	37	31	36	35	35	33	39	38	42	49	50	44	40	47	47	38	34	50	51	....	39.3
Lambertville	Maximum	57	64	40	52	59	59	64	55	47	44	44	49	42	52	53	56	49	56	65	71	75	79	69	59	56	71	58	64	75	75	....	59.6
	Minimum	32	32	41	28	28	36	35	40	40	39	36	39	31	34	28	32	29	37	35	37	42	47	50	33	45	46	37	34	41	49	....	37.1
Little Falls§§	Maximum	48	60	72	55	54	62	68	58	54	47	48	52	48	52	54	56	51	61	68	78	78	82	69	64	54	74	50	65	76	76	....	61.1
	Minimum	34	34	43	30	25	32	34	38	40	38	36	39	30	35	28	28	32	38	32	34	37	40	47	24	42	46	38	33	36	44	....	35.6
New Brunswick	Maximum	60	65	70	65	51	61	63	59	44	45	45	51	45	51	52	55	48	56	65	71	73	78	77	64	57	72	71	63	75	75	....	60.9
	Minimum	33	32	52	31	30	35	36	37	41	40	37	40	32	35	28	29	31	39	35	34	43	46	49	33	47	47	38	36	38	47	....	37.7
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Plainfield	Maximum	50	62	71	53	51	62	64	54	51	48	53	52	41	53	54	56	48	59	67	73	72	81	71	60	55	74	50	64	74	75	....	59.9
	Minimum	32	36	40	29	25	33	37	36	38	39	39	38	31	34	25	27	32	39	35	34	40	41	46	30	45	47	38	34	36	40	....	35.9
Ridgefield	Maximum	47	61	72	54	51	62	64	55	44	45	43	51	42	51	51	56	45	59	66	74	74	78	67	62	53	68	51	62	74	72	....	58.5
	Minimum	34	35	34	30	29	35	35	41	40	40	36	34	31	35	31	31	32	38	34	38	41	45	40	35	45	47	36	35	41	51	....	37.0
Somerville	Maximum	59	66	73	56	60	64	67	57	45	46	46	53	42	54	54	59	48	59	68	74	75	81	73	63	56	75	59	66	76	77	....	61.7
	Minimum	33	29	43	28	23	32	33	35	42	41	37	40	31	34	24	25	31	39	32	30	37	37	42	28	45	48	38	33	33	45	....	34.9
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	48	59	68	51	48	59	62	52	48	47	51	50	40	50	49	54	43	58	64	71	69	75	64	60	53	69	48	62	70	67	....	57.0
	Minimum	34	.38	34	31	35	40	37	41	41	39	38	35	31	36	36	35	33	39	39	45	52	53	43	40	48	45	34	37	55	52	....	39.9
The Southern Interior.																																	
Belleplain	Maximum	59	65	75	....	57	65	53	50	44	52	53	44	56	54	61	55	60	66	68	73	75	79	67	58	73	64	65	76	74	....	....	62.2[b]
	Minimum	35	25	....	28	23	38	33	31	41	40	43	36	34	26	24	28	35	28	28	38	33	40	36	47	45	35	33	37	55	....	....	34.8[b]
Bridgeton	Maximum	49	66	76	66	57	61	63	52	49	45	51	52	46	55	54	67	56	60	67	69	78	79	76	65	59	74	66	65	77	75	....	62.5
	Minimum	35	31	52	29	29	40	35	37	40	40	39	42	34	34	31	29	29	35	34	37	42	42	47	39	47	46	38	37	41	52	....	38.1
Burlington	Maximum	48	66	72	68	61	62	63	66	54	45	47	51	47	54	54	58	53	59	66	72	74	79	79	69	62	74	74	66	78	78	....	63.3
	Minimum	35	38	52	30	29	35	38	37	43	42	39	42	34	35	30	30	32	39	36	36	42	42	47	42	36	49	40	35	39	51	....	38.5
Clayton	Maximum	48	52	74	61	59	60	64	51	48	44	52	52	43	55	54	59	58	61	66	70	79	78	76	76	59	73	64	66	74	77	....	61.8
	Minimum	39	36	41	30	28	38	36	36	40	40	41	39	33	34	28	28	30	36	32	38	41	40	44	33	33	37	38	36	42	44	....	36.4
Freehold	Maximum	57	66	72	66	51	61	61	53	44	43	47	52	44	52	52	57	46	56	66	73	70	78	74	59	58	73	71	66	77	74	....	60.6
	Minimum	34	30	51	30	32	34	32	36	41	40	38	40	33	33	28	31	30	44	33	39	44	43	57	32	48	47	37	34	41	50	....	38.1
Hammonton	Maximum	52	67	76	53	61	63	64	53	50	43	51	55	48	56	56	61	53	61	66	72	76	77	76	63	61	75	73	66	78	76	....	62.7
	Minimum	33	29	45	28	25	36	35	33	41	38	38	41	32	30	26	26	27	34	31	32	41	37	42	32	46	43	36	33	36	50	....	35.2
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	59	67	76	66	62	60	63	54	47	44	47	54	46	54	53	60	54	59	65	72	74	77	75	70	61	76	68	65	80	79	....	62.9
	Minimum	35	37	52	28	34	37	36	34	42	40	39	42	32	32	25	34	30	35	29	30	38	41	43	28	47	46	38	34	36	50	....	36.8
Lakewood	Maximum	57	65	73	64	52	64	60	54	45	43	49	53	45	54	54	58	52	59	67	69	69	74	74	62	58	75	71	66	74	75	....	61.2
	Minimum	34	28	51	30	24	35	36	33	40	41	40	41	33	35	27	27	31	38	35	33	39	41	48	30	47	47	40	33	37	53	....	36.9
Moorestown	Maximum	46	66	73	52	59	59	61	54	48	43	46	51	42	53	54	58	53	58	66	71	73	78	74	61	59	73	50	64	77	76	....	59.9
	Minimum	34	32	36	29	29	40	36	37	40	39	38	37	32	32	29	30	31	37	35	36	44	42	46	33	48	47	39	38	42	52	....	37.3
Pemberton	Maximum	59	68	73	68	61	61	64	58	50	43	48	49	44	53	54	59	55	59	67	71	74	79	78	61	61	74	73	65	76	78	....	62.8
	Minimum	36	31	53	29	28	40	36	37	43	42	39	42	32	34	29	29	31	38	34	34	40	42	45	33	47	47	40	35	38	51	....	37.8
Pleasantville§§	Maximum	49	62	78	62	53	59	49	49	48	75	50	56	50	56	55	62	56	62	67	61	65	67	77	67	59	71	59	67	68	69	....	60.9
	Minimum	36	27	46	28	23	38	36	31	43	42	41	43	35	33	27	24	29	34	30	32	40	36	42	35	48	46	36	36	38	52	....	36.2
Runyon	Maximum	48	68	72	58	56	65	75	60	52	45	46	47	44	54	62	59	51	64	71	74	76	82	79	76	74	70	62	68	77	77	....	63.7
	Minimum	40	24	26	27	19	20	26	26	40	40	38	40	33	35	28	19	31	33	36	36	35	34	35	24	48	44	33	42	30	42	....	32.8
Trenton	Maximum	46	66	70	53	60	59	64	55	45	44	47	49	42	52	53	55	50	56	65	71	73	78	70	58	59	72	48	63	75	75	....	59.1
	Minimum	34	35	35	30	35	39	38	41	41	38	37	36	33	35	33	35	32	38	38	42	50	51	43	37	48	48	38	39	46	53	.. .	39.3
Tuckerton	Maximum	42	50	75	52	61	60	60	50	50	52	51	48	59	55	58	56	60	65	68	68	70	76	68	65	73	65	65	72	70	72	....	61.2
	Minimum	25	30	46	25	25	30	35	40	38	40	38	36	35	32	32	28	35	36	35	40	40	40	38	40	40	35	35	45	40	45	....	36.0
Philadelphia, Pa	Maximum	49	67	73	51	58	58	64	54	51	45	48	52	43	55	56	59	54	60	67	72	76	79	74	62	59	72	52	66	75	74	....	60.9
	Minimum	37	39	39	33	38	45	41	45	43	42	40	40	34	37	39	36	34	42	44	48	56	55	49	43	50	51	41	46	50	56	....	43.1
The Sea Coast.																																	
Asbury Park	Maximum	57	47	73	53	46	58	53	51	47	46	50	50	46	58	52	57	52	56	63	60	60	67	72	60	51	72	65	64	64	61	....	57.0
	Minimum	35	35	42	33	35	39	37	41	41	42	40	41	35	37	35	35	32	40	48	41	47	50	52	38	40	48	40	39	46	50	....	40.5
Atlantic City	Maximum	49	52	65	52	50	57	52	48	44	44	48	54	47	56	55	60	55	61	61	58	57	62	78	63	55	66	60	66	59	60	....	56.5
	Minimum	38	41	39	31	38	44	38	43	42	42	42	42	37	38	36	36	32	39	40	42	48	46	50	43	47	49	37	42	48	53	....	41.4
Cape May	Maximum	50	55	76	50	54	62	56	51	48	47	52	54	48	58	54	61	54	60	64	60	65	68	77	63	62	67	57	66	65	64	....	58.9
	Minimum	36	36	40	32	38	42	40	40	44	43	42	42	38	38	34	33	34	41	37	40	45	44	49	41	48	52	39	45	48	52	....	41.1
Long Branch	Maximum	43	56	73	50	45	55	53	40	42	46	48	42	39	41	51	60	43	55	61	60	61	66	68	56	51	70	48	62	66	69	....	54.0
	Minimum	30	30	35	30	27	34	35	34	36	39	37	36	32	30	33	31	32	37	34	36	39	42	40	46	44	42	37	35	40	47	....	36.0
Sandy Hook	Maximum	46	55	66	51	46	60	56	49	45	45	46	51	41	51	49	54	45	56	62	68	62	71	65	58	51	67	49	60	65	67	....	55.2
	Minimum	36	38	37	35	38	41	41	42	42	39	39	38	35	39	37	38	36	42	40	44	46	48	45	42	48	48	38	40	48	50	....	41.0

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	*	.160	.128	.272	.096	.202	.160	.160	.042	*	.100	.020	.240	.128	.160	.128	.160	.320	.192	.192	.208	.176	.240	.320	.232	.060	.170	*	.256	.192	....	4.714
	Wind movement	157	52	247	159	56	72	129	61	109	150	133	84	147	108	90	65	255	72	66	67	70	76	82	.119	71	74	131	120	86	121	....	3229
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.150	.180	.180	.180	.230	.230	.210	.200	.020	.040	.180	.210	.210	....	......
	Wind movement	108	106	85	51	41	30	29	43	73	86	62	90	105	90	50	52	68	30	31	39	56	32	39	39	47	52	62	52	30	75	....	1753

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. MAY, 1932. No. 5.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

So far as State averages are concerned, May was practically a normal month in temperature and below normal in rainfall. The highest temperatures for the month were in the high eighties and low nineties and were registered mostly during the 25th to 27th; the lowest were in the thirties and occurred on somewhat scattered dates, the 3d, 19th, 20th and 23d. There was, therefore, quite a range. Light to heavy frosts were reported from some of the stations in the northern portion on the 19th, 20th, 23d and 30th, but only one report of a killing frost was received, that being from the extreme northwest portion.

Moderately heavy rains fell over the northern portion of the State on the 1st and in the southern portion on the 12th and 13th, these being the heaviest rains of the month. In a few cases they were excessive. The bulk of the monthly total occurred during the first half of the month, while the latter half was relatively dry, the exceptional dates being, for the southern half, the 18th, and for the State as a whole, the 22d, 27th and 28th. The northern portion received relatively less rain than the southern, the percentage being 70 of the normal, while over the southern half it was about normal.

The crop season was marked by generally good progress during the month. There was no appreciable damage by frost. The adverse feature was the lack of rain in northern districts. No damage by wind or hail was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 60.5°, which was 0.4° above normal. The highest temperature was 94° at Belvidere on the 26th, and the lowest, 29°, at Layton on the 19th. The greatest daily range of temperature was 49° at Runyon on the 24th. The highest monthly mean temperature was 63.6° at Burlington, and the lowest, 57.8° at Asbury Park and Atlantic City.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +3.4°; Red Sandstone Plain, +3.0°; Southern Interior, +3.1°; Sea Coast, +3.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 2.98 inches, which was 0.65 inch below normal. The greatest monthly precipitation was 5.61 inches, at Northfield, and the least, 1.60 inches at Long Valley. The greatest amount of precipitation in any 24 consecutive hours was 2.55 inches at Port Norris on the 12th. The mean of the number of days on which 0.01 inch or more precipitation fell was 8, or 3 less than normal.

The precipitation accumulated departure from the normal for the year, 1932, to date, by sections, is: The Highlands, —2.33 inches; Red Sandstone Plain, —1.48 inch; Southern Interior, +1.54 inches; Sea Coast, +0.31 inch.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 14 miles per hour, which was 3 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 44 miles per hour from the northeast at Atlantic City on the 12th.

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MISCELLANEOUS.

The per cent of possible sunshine was 66, or 6 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.04 inches, or 0.05 inch above normal. The highest reading was 30.44 inches at Long Branch on the 19th, and the lowest 29.68 inches at Atlantic City on the 13th.

The mean stage of the Delaware River at Phillipsburg was 3.3 feet, and the highest 6.0 feet on the 10th. The mean stage at Trenton was 1.9 feet, and the highest 3.3 feet on the 11th.

Thunderstorms occurred on the following dates: 5, 6, 7, 8, 12, 13, 14, 17, 21, 22, 26, 27 and 28. Dense fog occurred on the 1st, at Verona and on the 1st, 20th and 27th at Atlantic City. Killing frost occurred on the 19th at Layton. Light to heavy frost occurred on the 19th at Layton. Light to heavy frost was prevalent as late as the 20th in the northern part and the southern interior of the State. An aurora was observed at Trenton on the night of 29-30th.

COMPARATIVE DATA FOR MAY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	57.3	90	29	2.74	5.20	1.18	......	......	......	......
1886	58.8	87	36	6.07	8.46	4.15	......	......	......	......
1887	63.3	94	35	1.37	3.82	**0.08**	......	......	9	6
1888	58.6	90	26	4.92	6.48	3.00	......	......	18	16
1889	62.3	94	32	4.09	6.60	2.43	......	......	11	12
1890	60.7	87	33	4.24	7.17	2.60	......	......	11	12
1891	59.5	93	28	2.97	5.39	1.78	9	11	11	9
1892	60.1	90	30	5.04	6.52	3.26	8	13	10	13
1893	59.4	95	29	4.07	6.38	2.55	13	8	10	10
1894	61.4	93	30	**7.72**	**15.61**	3.57	11	9	11	13
1895	60.9	**102**	28	2.85	3.95	1.66	12	12	7	8
1896	**65.3**	98	29	3.21	4.54	1.62	10	12	9	10
1897	60.6	87	29	5.68	9.11	1.71	11	12	8	12
1898	58.5	93	29	7.00	9.26	3.92	8	8	15	18
1899	61.1	94	29	1.92	3.15	1.15	12	12	7	9
1900	60.9	98	26	4.71	7.33	2.53	13	7	11	10
1901	58.6	90	29	5.60	8.13	3.10	9	9	13	16
1902	60.3	95	29	2.04	4.63	1.11	15	11	5	7
1903	62.7	98	**21**	**0.59**	**1.32**	**0.08**	16	10	5	4
1904	62.8	97	31	2.60	6.69	1.01	17	9	5	8
1905	61.4	89	22	1.71	3.94	0.42	12	11	8	8
1906	61.0	94	24	4.21	6.28	2.37	16	8	7	10
1907	55.4	91	22	5.05	8.09	2.51	12	9	10	12
1908	61.6	95	29	7.10	9.99	4.39	9	10	12	13
1909	60.0	91	27	2.30	4.84	0.79	10	11	10	9
1910	60.0	94	27	2.54	4.25	1.48	10	10	11	12
1911	64.5	99	22	1.37	3.84	0.31	14	11	6	7
1912	62.0	92	31	4.09	6.47	2.79	11	11	9	11
1913	60.3	94	25	3.45	4.86	2.53	15	7	9	9
1914	63.1	98	30	2.93	5.09	0.95	14	9	7	10
1915	58.1	88	30	3.82	6.15	2.00	13	7	11	13
1916	61.1	90	33	3.48	5.27	2.14	12	11	8	12
1917	**54.0**	90	25	3.83	6.83	2.08	10	10	11	11
1918	64.6	93	31	4.94	7.59	2.74	14	10	7	12
1919	60.9	95	31	4.98	7.68	3.06	14	6	11	12
1920	57.4	89	26	3.00	5.23	1.61	15	8	8	10
1921	60.2	96	32	4.17	6.44	2 60	14	7	10	10
1922	63.0	90	23	3.84	7.55	1.16	18	6	7	8
1923	59.1	90	25	1.66	3.62	0.67	20	6	5	6
1924	56.8	87	25	5.69	7.94	3.36	12	7	12	17
1925	57.7	99	23	2.86	4.94	0.49	13	11	7	8
1926	59.1	90	26	2.58	4.52	1.08	18	9	4	9
1927	58.1	88	30	3.65	8.16	1.93	9	10	12	13
1928	58.0	93	27	2.23	3.49	1.26	12	9	10	12
1929	59.9	95	26	3.49	5.58	1.26	13	8	10	13
1930	62.7	98	31	2.75	4.50	1.54	17	7	7	9
1931	60.4	97	**21**	3.73	2.20	0.77	14	6	11	12
1932	60.5	94	29	2.98	5.61	1.60	16	8	7	8
Normal	60.1	......	......	3.63	......	......	13	9	9	11
Extremes	......	102	21	......	15.61	0.08	......	......	......	......

W. B. O. Philadelphia-6-27-32-830.

Climatological Data for May, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	61.9	+1.2	94	26	36	3	45	3.81	−0.02	1.40	0	9	22	4	5	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	59.4	+1.9	88	26	30	22	45	2.29	−1.91	0.69	0	7	22	4	5	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	37	3	....	2.65	−0.98	1.01	0	6	18	8	5	s.	Brice E. Riker.
Dover	Morris	600	48	60.6^{a}	+2.0	90	26	37	19	38	1.82	−2.12	0.90	0	5	11	12	8	......	William C. Harris
Layton	Sussex	480	31	58.0	0.0	88	16†	29	19	46	3.40	+0.15	1.36	0	8	11	9	11	sw.	A. M. Depue.
Long Valley	Morris	520	1	59.3	......	90	25	34	20	45	1.60	......	0.59	0	6	16	8	7	s.	S. N .Dilts.
Newton	Sussex	769	48	61.0^{l}	+1.5	92	25	35	3	42	2.23	−1.70	0.64	0	7	18	6	7	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	61.6	+0.3	92	25†	38	23	43	3.46	−0.40	1.66	0	9	20	5	6	......	Town Engineer.
Sussex	Sussex	442	37	61.6^{b}	+1.7	92	16†	34	19	45	2.97	−0.75	0.93	0	5	18	9	4	......	A. J. W. Mowatt
Means and extremes	......	......	....	60.4	+1.2	94	26	29	19	46	2.69	−0.97	1.66	0	7	17	7	7	s.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	60.2	+1.0	91	16†	35	19	43	2.22	−1.84	0.83	......	7	16	2	13	sw.	John Kline.
Canoe Brook	Essex	173	2	58.8	......	89	26†	31	23	46	2.38	......	1.12	......	8	16	6	9	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	3.58	+0.08	1.19	......	9	22	6	3	......	Paul Molitor, Sr.
Elizabeth	Union	45	53	62.4	+0.4	93	25†	31	18	45	1.38	−2.44	0.49	0	9	18	6	7	sw.	Union County Park Com.
Flemington	Hunterdon	140	§46	61.4	+0.1	90	27	37	20	42	3.17	−0.85	1.07	0	11	23	3	5	sw.	Hiram E. Deats.
Jersey City	Hudson	10	34	62.2	+0.6	90	26	42	3	30	1.90	−1.68	0.53	0	8	12	12	7	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	60.6	−1.0	87	25†	38	3	35	4.03	+0.01	0.88	0	11	22	3	6	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	61.9	+2.2	92	26	38	23	41	2.76	−1.03	1.22	0	8	17	7	7	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	61.0	+0.6	90	27	39	3†	36	2.09	−1.80	0.60	0	9	14	12	5	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	2.19	......	0.88	......	7	...	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	......	......	......	......	......	......	....	......	......	......	......	....	...	....	....	......	Philip Del Vecchio.
Plainfield	Union	120	44	60.8	+0.6	91	26	38	3	43	2.13	−1.79	0.78	0	8	10	12	9	sw.	S. K .Pearson.
Ridgefield	Bergen	80	15	61.0	......	91	26	38	3	34	2.85	......	0.67	0	8	14	10	7	nc.	George P. Kirsten.
Somerville, near	Somerset	70	49	60.4	−0.4	90	25†	35	20	43	2.22	−1.63	0.80	0	9	15	6	10	w.	Julius Gerlich.
Verona	Essex	490	6	60.2	......	87	26	38	3	29	2.25	......	0.72	0	7	13	11	7	w.	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	2.06	......	0.90	0	5	....	....	....	......	Hackensack Water Co.
New York, N.Y.	......	365	62	60.9	+0.3	85	26	42	3	27	1.81	−1.43	0.52	0	9	9	14	8	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	60.9	+0.5	93	25†	31	18†	46	2.48	−1.30	1.22	0	8	16	8	7	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	59.8^{e}	−1.3	88	16	32	20	41	......	......	......	0	...	12	8	11	se.	A. F. Waldron.
Bridgeton	Cumberland	30	49	61.7	−2.3	89	27	37	3	34	4.33	+0.49	1.17	0	8	19	7	5	se.	Bennett K. Matlack
Burlington	Burlington	12	§46	63.6	+1.7	91	26†	40	4†	41	2.91	−1.30	0.68	0	9	16	10	5	w.	Public Service Power Co.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	......	......	......	....	...	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	60.6	......	91	27	37	3	37	3.06	−0.78	1.25	0	6	19	6	6	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	61.6	......	92	27	34	20	44	2.67	−1.61	0.75	0	8	21	7	3	sw.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	38	......	......	......	......	......	......	....	......	......	......	......	....	...	....	....	......	S. Elwood Croshaw.
Indian Mills‡‡	Burlington	76	43	61.8	−0.3	92	25†	34	20	46	3.14	−0.10	0.88	0	7	14	13	4	sw.	James M. Armstrong.
Lakewood	Ocean	54	28	60.9	+0.7	91	25†	37	20	38	3.61	+0.21	1.01	0	10	16	6	9	sw.	R. W. Holman.
Moorestown	Burlington	......	69	60.3	−1.0	89	26†	39	3	35	3.65	−0.37	1.23	0	9	19	5	7	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	5.61	+2.14	1.67	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	61.8	......	90	26†	37	20	42	2.74	......	0.80	0	8	19	5	7	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	58.4	......	83	17	34	4	40	4.35	+1.09	1.75	0	10	19	8	4	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	4.57	......	2.55	0	7	9	15	7	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	59.2	......	92	27	31	20	49	2.98	......	1.03	......	8	18	10	3	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	61.0	−0.1	88	27	40	3	30	3.08	0.00	1.01	0	12	9	15	7	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	3.50	......	1.01	......	11	...	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	59.2	−0.7	85	17	35	3†	40	3.76	+0.02	1.80	0	9	9	10	12	sw.	John H. Brown.
Philadelphia, Pa	......	117	61	63.4	+0.5	87	26	44	3	27	3.81	+0.55	1.17	0	9	7	17	7	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	60.8	−0.4	92	25†	31	20	49	3.60	−0.02	2.55	0	9	16	9	6	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	57.8	−1.0	81	17	39	3	30	2.30	−1.28	0.55	0	8	26	3	2	sw.	Information Bureau.
Atlantic City	Atlantic	16	59	57.8	−0.3	81	17	41	3	25	4.08	+1.03	2.03	0	10	10	12	9	s.	U. S. Weather Bureau.
Cape May	Cape May	17	48	59.4	+0.8	81	28	42	20	28	3.75	+0.76	1.87	0	9	8	13	10	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	58.8	+0.6	90	26	39	3	32	2.90	−0.86	1.56	0	10	18	6	7	sw.	William D. Martin.
Sandy Hook	Monmouth	22	34	59.8	+1.3	85	26	44	3	24	2.79	−0.93	1.40	0	9	9	13	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	58.7	+0.3	90	26	39	3	32	3.16	−0.26	2.03	0	9	14	9	8	sw.	
For the State	......	......	....	60.5	+0.4	94	26	29	19	49	2.98	−0.65	2.55	0	8	16	8	7	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for May, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	1.40	.18					.30	.18	.07		T.	.40	.04	T.													.58	.66				3.81
Charlotteburg	Passaic	.69	.02					.03	.51				.09										.40						.55				2.29
Culvers Lake	Delaware	1.01	.03					T.	.80	T.		T.	.08		T.							T.					T.	.44	.29				2.65
Dover	Passaic	.90						.10	.43				.11															.28					1.82
Layton	Delaware	1.36						.20	.72	.01		.04	.07															.38	.62				3.40
Long Valley	Morris		.07					.18		.03		T.	.17															.59	.56				1.60
Newton	Delaware	.64					T.	.02	.45	.04		T.	.17									T.					T.	.29	.62				2.23
Phillipsburg	...do	1.66	T.				.03	.23	.41			.19	.17	.08														.55	.14				3.46
Sussex	Hudson	.67						.04	.53																			.93	.80				2.97
The Red Sandstone Plain.																																	
Boonton‖‖	Passaic	T.	.83					.09	.39	.22			.01	.12															.56				2.22
Canoe Brook‖‖	Essex	T	1.12					.17	.08	.10			.23	.07									.04						.57				2.38
Chatham‖	...do	.09	1.19					.23	.09	.42			.24	.60									.02						.70				3.58
Elizabeth	Coast	.49	.02				T.	.25	.13	.01			.29	.11	T.			T.					.05					T.	.03				1.38
Flemington	Raritan	1.07	.27					.40	.15	.12	.02	T.	.28	.27				T.					.04					.52	03				3.17
Jersey City	Coast	.53					T.	.28	.40			T.	.27	.10	T.			T.	T.			.05						.20	.07	T.			1.90
Lambertville	Delaware	.88					.04	.22	.44	.01		.04	.27	.42									.83					.86	.02				4.03
Little Falls.‖‖	Passaic		1.22					.08	.42	.14			.10	.04									.05						.71				2.76
New Brunswick	Raritan	.60	.06					.21	.11	.05		T.	.22	.24	T.								.25						.35				2.09
New Milford‖‖	Hackensack		.88					.02	.20	.22				.06									.44						.37				2.19
Paterson	Passaic																					.62						30	.24				§
Plainfield	Raritan	.78					T.	.23	.12			T.	.32	.01	T.			T.				.04						.26	.37				2.13
Ridgefield**	Hackensack	.66						.10	.63	T.		T.	.14	.14	T.			T.				.51						*	.67				2.85
Somerville	Raritan	.80	.24					.24	.19			T.	.27	.12	T.								.08					.24	.04				2.22
Verona**	Passaic																																
Woodcliff Lake‖‖	Hackensack		.90						.34	.26			.02																.54				2.06
New York, N. Y***	Coast	.52					.17	.30	.19			T.	.26	.07	T.			T.	T.			.05						.20	.05	T.			1.81
The Southern Interior.																																	
Belleplain	Tuckahoe																																
Bridgeton	Coast	.29					24			.37		T.	.98	1.17					.29				.42						.57				4.33
Burlington	Delaware	.68					.10		.16	.10			.50	.63					.08				.40						.26				2.91
Clayton	...do																																
Freehold	Raritan	.23							.23				.45	.50	T.								.40						1.25				3.06
Hammonton	Mullica	.18					.27			.06			.75	.73					.26				.02						.40				2.67
Hightstown	Raritan																																
Indian Mills	Mullica	.32					.06			.07			.88	.75					.34									.72					3.14
Lakewood	Metedeconk	.06					T.	.06	.03	.19			.80	1.00	.02				.35				.10						1.01				3.61
Moorestown‖‖	Delaware	T.	.70				.13	T.	.05	.18			.12	1.23					.10				.27						.87				3.65
Northfield	Coast	.09					.29			.03		T.	1.67	1.50					.85				.50						.68				5.61
Pemberton	Delaware	.22				T.			.09	.12		T.	.70	.49					.18				.14						.80				2.74
Pleasantville‖‖	Coast		.10				.01	.10		T.	T.		.65	1.75			.15		.70	.06			.23						.60				4.35
Port Norris	Maurice	.16					.33			.12			2.55						.69				.15						.57				4.57
Runyon	Coast	.31						.10	.14				.33	.43					.21				1.03						.43				2.98
Trenton***	Delaware	.82				.01	.10	.07	.22	.01		.02	.62	.39				T.	.04			.33						.45	T.				3.08
Trenton No. 2‖‖	...do	T.	.94				.03	.14	.04	.24	.02		.07	1.01					.04				.39						.58				3.50
Tuckerton	Coast						.05			.01		.02	1.80	.90	.02			.10	.40										.46				3.76
Phila., Pa***	Delaware	.92				T.	.12		.14	T.		.19	1.10	.08				T.	.03			.23						1.00					3.81
The Sea Coast.																																	
Asbury Park	Coast	.28						.02	.14				.26	.53	T.				.22			T.	.30					.55					2.30
Atlantic City***	...do	.28					.11		T.	T		T	2.02	.13	.25			.16	.63				.17					.26	.07				4.08
Cape May	...do	.17				T.	.08	T.		.09		T.	1.67	.35				T.	.78				.01					.44	.16				3.75
Long Branch**	...do	.16						.16	.10			T.		1.56	.09				.12			.16	.12					.33	.20				2.90
Sandy Hook***	...do	.10					T.	.16	.10			T.	.41	.41					.08			.13						1.25	.15	T.			2.79

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity, per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.06	30.42	19	29.68	13	16.5	44	ne.	12	81	76	78	61
ong Branch	30.02	30.44	19	29.75	13					70	59	60	
New York, N. Y	30.03	30.42	19	29.75	13	13.1	49	nw.	27	67	52	59	69
Philadelphia, Pa	30.06	30.46	19	29.73	13	13.3	30	n.	1	66	49	53	70
Ridgefield	30.03	30.42	19	29.74	13								
Sandy Hook	30.03	30.42	19	29.69	13	13.4	41	sw.	1	73	58	72	68
Trenton	30.04	30.41	19	29.70	13	10.8	30	ne.	13	69	52	59	69

Daily Temperatures for May, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	72	63	70	75	71	67	69	64	64	64	59	60	73	79	82	91	80	72	78	81	82	79	79	85	93	94	91	77	66	75	80	75.3
	Minimum	57	47	36	42	39	49	50	51	51	47	42	49	48	47	46	54	60	48	38	40	48	52	37	40	54	61	63	62	51	39	57	48.5
Charlotteburg	Maximum	71	59	66	72	71	64	61	59	63	60	60	63	69	77	80	87	80	78	75	78	75	70	78	80	87	88	87	87	72	72	81	73.2
	Minimum	53	48	36	46	48	45	46	46	48	40	40	48	46	48	42	57	52	45	38	33	34	30	34	40	50	56	60	59	55	40	55	45.7
Dover	Maximum	64	62	69	73	65	61	60	53	62	58	58	60	70	78	80	87	79	70	73	78	84	71	75	82	89	90	88	76	65	75	76	72.0
	Minimum	55	41	38	45	52	48	49	48	49	44	41	48	48	51	48	59	66	47	37	40	52	49	38	....	55	65	62	55	48	46	52	49.2
Layton	Maximum	65	60	67	74	64	61	60	55	67	63	62	63	72	77	80	88	75	67	73	77	83	71	72	79	88	88	86	74	59	72	75	71.5
	Minimum	40	41	34	40	49	45	45	48	55	42	36	47	47	40	40	52	58	45	29	35	42	44	31	33	53	57	60	56	48	33	51	44.4
Long Valley	Maximum	70	65	68	73	62	65	67	67	61	59	59	60	68	76	79	82	76	72	75	77	83	75	74	80	80	89	88	72	61	71	76	72.3
	Minimum	52	48	40	40	51	45	47	48	49	43	40	48	45	49	44	52	58	46	35	34	41	50	37	35	51	56	60	54	50	44	43	46.3
Newton	Maximum	68	63	70	77	68	64	63	55	65	64	66	65	....	....	84	91	81	83	79	83	87	73	80	85	92	88	91	79	59	79	89	75.6
	Minimum	51	38	35	43	48	45	44	44	46	40	38	44	....	....	46	55	58	43	37	42	50	45	47	44	52	64	60	52	45	39	54	46.5
Phillipsburg	Maximum	66	63	70	75	67	71	70	55	61	59	57	59	73	79	82	89	80	69	75	79	86	71	76	83	92	92	90	77	63	74	79	73.6
	Minimum	56	44	41	55	54	51	51	51	50	48	44	50	47	45	46	54	60	49	40	40	47	50	38	40	52	61	65	60	53	43	50	49.5
Sussex	Maximum	74	61	67	....	77	67	68	56	....	72	68	63	76	80	83	92	90	69	79	82	85	79	79	83	92	92	91	73	59	76	78	76.2
	Minimum	55	45	35	....	41	47	47	48	....	43	38	49	48	47	47	56	61	46	34	40	48	49	35	35	53	62	60	59	48	37	52	47.1
The Red Sandstone Plain.																																	
Boonton§§	Maximum	64	70	71	74	67	63	61	58	65	62	61	63	71	84	80	91	77	69	73	74	86	70	75	79	89	91	90	81	69	74	74	73.4
	Minimum	48	50	39	44	53	46	46	48	48	42	41	43	47	41	48	52	58	48	35	37	46	52	36	37	53	59	58	60	51	43	49	47.0
Canoe Brook§§	Maximum	60	63	68	73	68	60	62	56	61	59	59	60	72	77	80	87	77	73	69	75	88	71	74	80	88	89	89	75	69	72	76	71.9
	Minimum	57	44	38	37	50	44	47	49	49	43	43	47	46	42	42	53	58	49	35	35	45	53	31	34	51	58	60	60	42	35	43	45.8
Elizabeth	Maximum	69	67	71	76	75	66	62	58	63	63	60	61	65	81	82	91	88	76	72	79	86	83	79	83	93	93	93	80	66	78	81	75.5
	Minimum	55	51	39	43	55	50	49	51	50	47	45	48	49	47	48	56	61	3.	42	40	50	54	39	44	55	62	64	56	49	46	48	49.2
Flemington	Maximum	70	63	67	74	73	72	72	62	60	57	57	58	72	82	80	88	82	73	77	78	84	78	78	82	89	89	90	80	70	77	79	74.6
	Minimum	56	50	38	41	53	50	49	49	49	44	42	49	47	48	47	54	58	49	40	37	46	53	38	40	50	57	62	65	50	43	44	48.3
Jersey City	Maximum	64	65	70	74	68	61	62	58	61	60	60	60	64	78	78	88	80	70	70	73	83	69	75	79	88	90	83	77	63	74	77	71.7
	Minimum	57	48	42	50	56	51	50	51	51	46	46	48	51	50	54	60	59	50	49	48	54	54	48	54	58	65	65	62	51	50	52	52.6
Lambertville	Maximum	68	71	67	73	70	68	67	53	61	58	58	53	62	76	79	86	77	70	72	75	82	74	70	78	87	87	87	74	66	72	75	71.5
	Minimum	56	42	38	46	52	50	48	47	48	43	41	45	45	50	52	57	61	54	46	43	51	52	42	49	52	60	63	65	49	44	49	49.7
Little Falls§§	Maximum	61	65	72	77	68	64	62	59	66	63	61	63	70	80	82	90	81	74	73	79	85	71	77	81	90	92	91	79	70	77	78	74.2
	Minimum	59	50	39	43	53	49	48	48	49	44	42	45	49	49	46	62	63	50	39	42	51	52	38	40	58	62	63	62	48	44	51	49.6
New Brunswick	Maximum	69	63	69	73	72	67	61	55	59	56	55	55	61	76	79	88	85	73	69	75	82	78	72	80	85	89	90	76	71	72	76	72.1
	Minimum	57	51	39	42	56	52	50	49	48	46	42	48	46	47	49	56	62	50	43	39	51	54	40	45	53	61	64	65	50	43	47	49.8
Paterson	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	79	83	67	75	80	90	92	89	77	73	75	78	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	47	54	52	45	48	58	65	66	64	51	48	54	......
Plainfield	Maximum	65	65	70	74	69	62	62	58	60	60	60	59	65	79	80	89	80	70	70	76	85	66	76	84	90	91	88	78	62	77	79	72.6
	Minimum	57	49	38	40	53	50	49	49	49	44	43	46	46	48	48	55	60	49	40	41	49	54	39	41	53	60	62	64	50	44	47	48.9
Ridgefield	Maximum	61	66	72	75	67	62	58	57	63	58	58	61	62	79	79	87	80	71	70	76	84	66	75	78	90	91	86	77	62	75	75	71.6
	Minimum	55	41	38	46	55	52	48	49	50	46	42	48	49	49	52	61	63	48	41	47	53	49	42	46	56	64	67	53	49	48	52	50.3
Somerville	Maximum	67	65	70	75	66	70	65	55	63	59	60	60	67	79	80	87	80	71	70	78	83	74	75	82	90	90	90	78	65	76	79	73.2
	Minimum	56	50	36	39	55	51	50	50	49	43	42	48	47	47	47	52	57	50	36	35	45	55	36	40	50	60	64	60	48	40	42	47.7
Verona	Maximum	64	61	66	71	65	60	57	54	60	57	57	60	64	77	78	85	80	64	68	74	81	67	71	77	85	87	86	75	60	70	74	69.5
	Minimum	56	52	38	47	54	52	48	48	50	44	41	47	49	49	51	62	64	49	42	46	55	51	42	48	56	63	64	62	56	45	51	51.0
New York, N. Y	Maximum	62	63	69	72	66	58	60	56	61	60	59	60	64	76	74	83	77	67	68	70	79	68	71	74	84	85	78	75	63	71	71	69.2
	Minimum	53	43	42	52	56	51	50	51	51	46	46	48	52	50	56	62	59	51	51	50	55	51	49	56	59	65	66	56	51	51	53	52.6
The Southern Interior.																																	
Belleplain	Maximum	65	69	66	76	75	....	82	64	63	....	62	53	63	78	84	88	81	67	68	71	80	70	69	....	83	85	....	86	65	....	72	72.5
	Minimum	57	48	35	36	53	....	48	49	48	....	44	49	45	44	45	58	63	48	38	32	53	53	35	..	42	62	....	58	47	....	38	47.2
Bridgeton	Maximum	65	68	65	75	74	69	85	72	63	65	63	54	68	77	80	88	80	69	73	73	80	74	70	79	84	88	89	77	74	73	77	73.9
	Minimum	57	53	37	41	48	47	52	48	47	45	46	47	43	45	50	56	63	46	42	40	55	56	42	46	52	62	63	65	48	44	48	49.5
Burlington	Maximum	77	70	67	75	75	72	70	70	61	63	64	58	65	79	84	90	89	78	75	77	83	83	81	80	90	91	91	90	76	73	73	76.5
	Minimum	48	54	41	40	55	51	54	49	51	47	45	50	47	44	47	49	66	50	44	40	51	48	44	47	53	63	65	67	55	53	58	50.8
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	60	66	68	75	75	67	63	54	60	57	56	53	60	77	81	90	84	70	69	76	83	73	72	82	90	90	91	76	66	73	80	72.2
	Minimum	56	50	37	42	53	51	48	50	48	44	43	47	46	46	49	54	61	46	39	42	50	55	39	49	53	62	64	66	42	44	46	49.1
Hammonton	Maximum	78	70	68	78	76	70	82	63	65	65	61	53	65	80	81	90	84	77	74	78	82	80	74	82	89	89	92	88	78	75	79	76.3
	Minimum	54	51	35	37	55	47	50	47	42	41	45	46	43	43	42	55	63	46	37	34	46	48	36	40	54	60	62	68	47	40	44	47.0
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	70	67	68	77	70	73	79	60	63	63	60	51	66	80	83	92	82	70	73	80	84	75	74	83	92	92	88	78	65	73	80	74.5
	Minimum	58	52	38	36	67	49	52	49	49	45	46	46	45	40	46	54	65	48	37	34	48	57	36	40	54	62	64	65	48	42	42	49.2
Lakewood	Maximum	69	67	69	76	73	66	63	58	60	57	55	52	59	79	79	85	81	75	68	71	83	75	73	82	91	91	89	77	72	71	75	72.3
	Minimum	59	52	39	40	56	49	52	49	48	44	45	47	47	46	47	55	60	49	40	37	52	55	40	44	54	61	62	65	49	44	47	49.5
Moorestown	Maximum	64	65	66	75	68	71	72	54	61	63	61	52	63	78	79	88	79	66	74	75	82	68	72	79	87	89	89	77	63	72	77	71.9
	Minimum	58	43	39	40	54	49	49	48	46	45	44	45	47	45	50	56	62	45	40	40	50	49	41	45	53	63	64	57	50	45	47	48.7
Pemberton	Maximum	65	67	69	75	75	72	74	68	61	60	61	52	64	78	79	89	85	71	72	79	81	72	72	80	89	90	90	83	68	74	77	73.9
	Minimum	59	53	38	40	55	50	53	48	49	46	46	47	47	45	48	55	66	48	41	37	51	57	41	45	52	60	63	66	49	44	45	49.8
Pleasantville§§	Maximum	62	69	68	74	70	62	66	62	59	58	57	52	62	....	75	74	83	70	65	66	75	63	73	73	78	78	75	81	69	69	71	68.6
	Minimum	55	50	37	34	54	50	51	49	50	45	48	49	46	44	....	55	58	49	39	35	35	59	38	43	57	60	60	62	50	40	44	48.2
Runyon	Maximum	69	70	72	77	68	69	66	60	61	58	59	58	63	86	88	91	85	79	72	75	81	74	78	82	90	91	92	78	71	76	79	74.7
	Minimum	41	40	35	35	38	44	44	46	44	42	44	42	46	40	42	50	56	47	33	31	36	50	32	33	48	58	61	58	46	40	54	43.7
Trenton	Maximum	63	64	67	73	69	69	66	53	60	57	56	53	63	76	79	87	77	68	74	75	81	68	70	79	86	87	88	75	63	72	76	70.8
	Minimum	55	44	40	48	56	53	49	48	48	46	44	48	47	48	55	59	63	49	46	48	54	52	46	51	56	63	65	56	52	48	51	51.2
Tuckerton	Maximum	68	70	69	75	68	65	69	68	60	58	59	50	58	80	75	80	85	70	65	70	75	72	72	77	80	80	80	81	80	80	75	71.4
	Minimum	45	55	35	45	55	50	45	44	45	40	45	40	42	42	45	45	45	46	45	35	50	50	37	45	55	60	60	65	50	50	45	47.0
Philadelphia, Pa	Maximum	65	64	68	75	69	73	76	56	63	67	63	54	66	77	78	87	78	68	72	73	78	70	72	78	86	87	87	78	64	73	75	72.3
	Minimum	57	46	44	55	57	53	52	50	52	49	48	49	51	53	59	62	67	53	50	52	58	56	50	56	59	66	68	58	54	51	55	54.5
The Sea Coast.																																	
Asbury Park	Maximum	61	66	69	63	64	59	56	53	56	53	52	52	58	77	66	68	81	70	60	62	73	66	72	67	73	77	69	73	66	66	71	65.1
	Minimum	49	54	39	48	55	53	51	50	49	47	47	49	48	49	52	52	56	50	47	47	54	56	46	50	57	57	53	57	51	40	52	50.5
Atlantic City	Maximum	62	66	66	66	64	59	61	55	57	54	52	51	58	75	69	65	81	59	60	62	67	64	66	66	66	67	67	81	65	67	65	64.0
	Minimum	53	46	41	50	54	52	49	50	50	48	48	48	48	52	57	56	57	49	48	46	56	53	47	52	58	58	58	59	52	48	56	51.6
Cape May	Maximum	60	67	65	68	69	64	70	60	63	61	58	52	62	78	72	70	80	61	64	68	72	66	73	70	75	72	72	81	69	72	70	67.9
	Minimum	54	46	43	47	53	51	50	50	49	50	50	48	47	50	52	56	55	49	46	42	55	47	45	54	58	60	60	60	50	48	53	50.9
Long Branch	Maximum	61	66	66	67	62	57	55	52	56	52	51	50	60	75	74	85	79	70	70	70	81	66	70	76	81	90	80	75	63	71	73	67.9
	Minimum	48	43	39	43	50	49	48	47	48	45	43	45	44	43	53	59	56	46	40	45	51	49	54	60	58	63	60	59	53	51	50	49.7
Sandy Hook	Maximum	62	63	66	70	65	58	55	53	55	54	55	55	58	75	73	78	76	64	62	65	78	64	70	74	82	85	77	73	64	69	70	66.7
	Minimum	53	46	44	50	56	52	50	50	50	47	46	49	48	51	54	60	61	50	52	51	55	56	51	55	59	64	57	58	54	53	56	52.8

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.100	.128	.256	.192	.298	.084	.128	.256	.064	.288	.138	.438	.064	•	.390	.256	.124	.220	.256	.272	.294	.256	.256	.272	.320	.288	.200	.256	.128	.272	.224	6.67
	Wind movement	147	70	97	33	121	88	*	176	76	74	157	117	134	64	*	134	100	61	41	57	71	83	78	46	92	97	94	95	84	49	56	259
Runyon	Evaporation	130	150	.150	.195	.185	.120	.100	.140	.160	.180	.180	.030	.040	.180	.220	.230	.230	.390	.180	.180	.180	.190	.250	.260	.295	.195	.300	.170	.180	.210	.210	5.81
	Wind movement	27	49	23	26	24	35	37	34	81	58	84	76	46	35	33	41	42	26	33	35	38	36	31	33	56	61	47	33	34	30	34	128

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. • Measurement included in next followin ecord. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. JUNE, 1932. No. 6.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month averaged nearly normal in both temperature and rainfall, with the State average temperature exactly the same as for June of last year. The main warm periods for the State as a whole were from the 1st to 7th, inc., and the 26th to 30th, with the highest temperatures for the month recorded mostly on the 5th and 6th in the northern portion and on the 26th and 27th in the southern part. Most of the stations reported highest temperature of the month in the low nineties. Cool periods came on the 8th, and during the 18th to 20 inc., with the lowest for the month in the high thirties and low forties, with a few exceptions, and occurring on the 8th quite generally. Killing frost was reported from a few stations in the higher altitudes of the northern section, and light frost from other stations, especially in the cranberry bogs.

Light to moderate scattered showers occurred during the 2d to 7th inc., and general showers from the 12th to 17th inc. Moderately heavy rains then occurred over the northern part of the state on the 22d, and heavy rains over the whole state on the 27-28th. The state average was 101% of normal, ranging from 85% of normal in the Red Sandstone Plain to 110% in the Southern Interior. The month ended with the soil generally in a good condition so far as moisture is concerned.

No destructive wind or hail storms were reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 69.3°, which was 0.8° above normal. The highest temperature was 98° at Newton on the 5th, and the lowest, 30°, at Layton and Runyon on the 8th. The greatest daily range of temperature was 50° at Tuckerton on the 8th. The highest monthly mean temperature was 72.2° at Camden, and the lowest, 65.5° at Layton.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +3.0°; Red Sandstone Plain, +2.6°; Southern Interior, +2.8°; Sea Coast, +2.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 3.68 inches, which was 0.02 inch above normal. The greatest monthly precipitation was 6.59 inches, at Sussex, and the least, 1.83 inches at Flemington. The greatest amount of precipitation in any 24 consecutive hours was 2.25 inches at Pleasantville on the 18th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or normal.

The precipitation accumulated departure from the normal for the year, 1932, to date, by sections, is: The Highlands, —2.09 inches; Red Sandstone Plain, —2.04 inches; Southern Interior, +1.89 inches; Sea Coast, +0.42 inch.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 12 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 40 miles per hour from the west at Sandy Hook on the 27th.

MISCELLANEOUS.

The per cent of possible sunshine was 64, or 3 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.90 inches, or 0.09 inch below normal. The highest reading was 30.28 inches at Ridgefield on the 18th, and the lowest 29.45 inches at Sandy Hook on the 7th.

The mean stage of the Delaware River at Phillipsburg was 2.6 feet, and the highest 4.2 feet on the 20th. The mean stage at Trenton was 1.5 feet, and the highest 3.3 feet on the 19th.

Thunderstorms occurred on the following dates: 4, 5, 6, 7, 15, 16, 17, 22, 25, 26, 27 and 28. Dense fog was noted on the 14th along the coast and on the 15th in the southern interior of the State. Killing frost occurred on the 8th at Belleplain and Layton. Hail fell on the 6th at a few stations in the northwestern part of the State and on the 7th at scattered places in the southern half. No damage was reported.

COMPARATIVE DATA FOR JUNE

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Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	[illegible]	97	39	1.79	3.37	0.72	......	......	......	......
1886	[illegible]	[illegible]	41	3.38	5.79	2.22	......	......	......	......
1887	68.2	97	[illegible]	[illegible]	10.29	4.21	......	......	9	10
1888	70.8	99	39	[illegible]	5.69	1.67	......	......	5	6
1889	69.9	91	40	3.73	6.75	2.39	......	......	10	10
1890	[illegible]	95	42	3.59	5.16	0.99	11	13	6	7
1891	[illegible]	[illegible]	38	2.92	6.71	1.24	14	9	7	5
1892	72.4	[illegible]	[illegible]	3.85	6.12	1.58	10	12	8	11
1893	69.7	103	[illegible]	2.95	7.02	0.46	10	11	9	8
1894	70.6	102	35	2.28	5.90	0.99	14	11	5	9
1895	[illegible]	103	39	3.24	5.99	0.93	11	11	8	10
1896	68.1	[illegible]	37	5.46	13.45	2.64	12	10	8	10
1897	66.1	95	[illegible]	[illegible]	5.50	2.12	10	13	7	10
1898	70.1	100	38	2.10	3.54	1.13	14	12	4	8
1899	72.3	103	38	2.50	4.34	1.01	15	10	5	7
1900	70.4	97	39	3.08	4.91	1.10	12	12	6	8
1901	70.0	103	35	**1.57**	4.36	0.73	18	8	4	5
1902	67.5	99	37	6.57	10.21	4.54	14	11	5	11
1903	**64.0**	92	37	**7.68**	**15.02**	2.39	6	10	14	15
1904	68.6	100	34	3.13	5.44	1.91	13	10	7	12
1905	68.3	96	35	3.43	8.71	1.67	11	12	7	10
1906	70.4	98	38	4.48	9.18	1.45	11	11	8	12
1907	64.7	96	31	4.41	6.85	3.15	12	10	8	10
1908	69.9	99	35	2.32	4.63	0.77	16	12	2	4
1909	70.0	99	36	3.26	5.70	1.71	9	10	11	12
1910	66.9	95	34	5.17	8.01	2.66	9	10	11	13
1911	68.9	97	40	5.36	10.11	2.84	9	12	9	14
1912	68.0	98	33	1.94	3.61	0.91	9	12	9	8
1913	69.1	98	31	1.80	3.76	0.68	19	8	3	5
1914	68.5	98	35	2.66	4.85	1.09	16	9	6	7
1915	67.0	95	37	3.12	6.51	1.40	13	10	7	11
1916	64.7	87	36	4.20	5.99	2.22	10	9	11	13
1917	68.9	95	40	4.27	7.14	2.80	13	10	7	12
1918	66.3	96	32	3.43	6.21	1.35	15	9	6	8
1919	69.5	99	38	3.16	3.58	**0.37**	16	7	7	8
1920	68.4	98	38	6.18	11.26	3.12	13	9	8	12
1921	70.4	100	33	3.23	5.64	1.40	18	7	5	8
1922	71 1	95	39	6.31	11 50	2.97	12	9	9	15
1923	72.5	**106**	37	2.08	5.44	0.72	18	8	4	7
1924	66.8	95	**30**	4.20	7.32	1.72	11	11	8	13
1925	**73.6**	103	36	3.10	6.16	0.72	17	9	4	9
1926	64.9	97	31	2.60	4.73	1.29	12	9	9	11
1927	65.4	97	31	3.16	5.24	1.46	15	9	6	10
1928	66.6	93	36	6.75	10.34	3.03	10	9	11	15
1929	69.5	98	33	3.11	5.41	1.41	15	9	6	9
1930	70.8	98	**30**	4.17	6.48	2.46	16	8	6	8
1931	69.3	101	40	4.84	7.42	2.18	16	7	7	10
1932	69.3	98	**30**	3.68	6.59	1.83	13	8	9	10
Normal	68.5	....	....	3.66	....	....	13	10	7	10
Extremes	....	106	30	....	15.02	0.37	......	......	......	......

W. B. O. Philadelphia-7-29-32-830.

Climatological Data for June, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	70.6^{e}	+1.8	93	5†	38	8†	40	3.25	−0.75	0.96	0	10	17	3	10	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	66.0	+1.2	89	5†	36	8	41	3.14	−0.98	0.95	0	10	19	3	8	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	39	8	....	5.26	+0.65	1.43	0	10	18	5	7	s.	Brice E. Riker.
Dover	Morris	600	48	68.3^{e}	+1.6	92	5	39	8	38	3.74	−0.29	1.30	0	8	4	11	15	......	William C. Harris
Layton	Sussex	480	31	65.5	0.0	91	5	30	8	46	4.98	+1.19	1.53	0	11	12	3	15	w.	A. M. Depue.
Long Valley	Morris	520	1	66.5	......	90	5	36	8	38	3.51	....	1.16	0	10	16	8	6	se.	S. N .Dilts.
Newton	Sussex	769	48	68.6	+0.6	98	5	36	8	44	3.26	−0.72	0.73	0	9	9	7	14	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	69.0	−0.3	91	6†	43	8	37	3.50	−0.13	1.60	0	12	9	11	10	......	Town Engineer.
Sussex	Sussex	442	37	68.8	+2.0	97	5	37	8	44	6.59	+2.91	2.01	0	11	11	4	15	......	A. J. W. Mowatt
Means and extremes	......	......	....	67.9	+1.0	98	5	30	8	46	4.14	+0.24	2.01	0	10	13	6	11	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	67.7	+0.1	91	5†	36	8	38	3.73	+0.06	1.02	......	9	13	1	16	sw.	John Kline.
Canoe Brook	Essex	173	2	66.6	......	90	6†	31	8	45	2.89	....	1.15	......	7	11	12	7	w.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	3.00	−1.06	1.09	......	10	18	7	5	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	70.6^{a}	+0.1	95	5†	39	9	42	3.26	−0.36	0.75	0	9	17	8	5	w.	Union County Park Com.
Flemington	Hunterdon	140	§46	70.0	+0.8	93	26	42	9	40	1.83	−2.01	0.42	0	9	13	8	9	sw.	Hiram E. Deats.
Jersey City	Hudson	10	34	70.7	−0.2	92	5	46	8	31	3.89	+0.39	1.46	0	7	10	10	10	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	69.0	−0.7	91	25	40	8	33	3.37	−0.54	1.60	0	11	15	6	9	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	69.5	+1.5	95	5	37	8	39	3.13	−0.39	1.06	0	9	13	5	12	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	69.6	+0.5	90	5†	40	8	35	4.07	+0.31	1.55	0	9	13	14	3	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	2.77	....	0.82	......	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	70.2	+0.4	91	5	43	8	33	3.25	−0.87	0.78	0	11	10	12	8	nw.	Philip Del Vecchio.
Plainfield	Union	120	44	69.2	+0.6	93	5	39	8	35	3.72	−0.02	1.34	0	10	8	10	12	sw.	S. K .Pearson.
Ridgefield	Bergen	80	15	68.8	......	91	5†	41	8	34	3.38	....	1.60	0	7	10	13	7	nw	George P. Kirsten.
Somerville, near	Somerset	70	49	70.0	+0.9	96	5	34	8	41	2.07	−1.67	0.54	0	11	11	5	14	w.	Julius Gerlich.
Verona	Essex	490	6	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Luther Davis.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	2.57	....	0.86	......	7	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	62	69.0	+0.2	88	5	47	8	28	3.57	+0.24	1.26	0	7	8	11	11	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	69.3	+0.4	96	5	31	8	45	3.13	−0.56	1.60	0	9	12	9	9	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	69.2^{f}	+0.5	92^{f}	25†	36	8	35	3.99	+0.77	......	......	....	8	10	12	w.	A. F. Waldron.
Bridgeton	Cumberland	30	49	71.2	−0.9	94	26	45	8	34	3.19	−0.54	1.40	0	11	20	3	7	sw.	Bennett K. Matlack
Burlington	Burlington	12	§46	71.8	+2.1	95	23	43	13	41	5.66	+1.78	2.00	0	12	12	12	6	sw.	Public Service Power Co.
Camden	Camden	20	....	72.2	......	96	26	53	20	34	2.86	....	1.07	0	9	6	11	13	sw.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	70.1	......	92	27	37	6	34	3.81	+0.18	1.60	0	10	19	5	6	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	70.8	......	95	26	44	24	40	4.42	+0.90	1.46	0	11	18	8	4	s.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	38	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	S. Elwood Croshaw.
Indian Mills‡‡	Burlington	76	43	70.4	+0.6	96	26	38	8	39	4.36	+0.23	1.25	0	11	9	14	7	sw.	James M. Armstrong.
Lakewood	Ocean	54	28	69.8	+2.3	91	27	40	8	35	3.29	−0.42	1.00	0	9	15	6	9	sw.	R. W. Holman.
Moorestown	Burlington	......	69	69.8	−0.2	93	26	42	8	33	2.82	−0.90	1.00	0	8	16	5	9	......	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	4.94	+1.27	1.63	0	12	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	70.8	......	92	26	43	8	34	4.28	....	0.78	0	12	12	7	11	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	69.2	......	95	26	40	8	34	4.76	+0.83	2.25	0	10	21	4	5	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	3.63	....	1.02	0	7	19	5	6	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	68.0	......	93	5†	30	8	46	4.95	....	1.64	0	9	17	12	1	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	70.3	+0.8	92	26	44	8	28	3.49	+0.40	1.54	0	12	9	7	14	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	3.19	....	1.78	0	11	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	70.6	+2.2	95	6†	34	8	50	3.52	−0.31	1.52	0	9	9	8	13	sw.	John H. Brown.
Philadelphia, Pa	......	117	61	72.6	+1.2	92	26	50	8	25	3.39	+0.15	1.27	0	10	9	9	12	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	70.3	+0.9	96	26	30	8	50	3.95	+0.35	2.25	0	10	14	8	8	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	67.4	0.0	90	27	44	8	25	3.39	−0.23	1.36	0	12	20	5	5	sw.	Information Bureau.
Atlantic City	Atlantic	16	59	68.5	+1.9	90	22	46	8	27	3.74	+0.70	1.42	0	11	9	10	11	sw.	U. S. Weather Bureau.
Cape May	Cape May	17	48	69.0^{b}	+1.3	90	22	46	8	29	3.33	+0.29	1.50	0	11	6	16	8	se.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	68.4	+2.2	93	27	39	8	33	3.93	+0.13	1.80	0	8	11	10	9	se.	William D. Martin.
Sandy Hook	Monmouth	22	34	68.6	+0.8	87	6	50	8	24	3.55	−0.23	1.47	0	8	10	9	11	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	68.4	+1.2	93	27	39	8	33	3.59	+0.11	1.80	0	10	11	10	9	sw.	
For the State	......	......	....	69.3	+0.8	98	5	30	8	50	3.68	+0.02	2.25	0	10	13	8	9	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for June, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		.10					.10					.45	.28	.03		.17	.16					.45				T.	.96	.55				3.25
Charlotteburg	Passaic		.09	.02				.30						.95	.07		.56	.58					.02					.35	.20				3.14
Culvers Lake	Delaware			T.			.39						.58	.54	.03	1.13	1.43	.43					.35			T.		.30	.08				5.26
Dover	Passaic		.12	.01			.01						1.10	.03			.22						1.30					.95					3.74
Layton	Delaware		.07	.12			.30						.70	.51	T.	1.53	.67	.15					.54			.02		.37	T				4.98
Long Valley	Morris		.09				T.	.02					.50	.16	.01		.16	.48					.43				T.	.50	1.16				3.51
Newton	Delaware		.14	T.	T.		.36						.40	.32	.01		.26	.47					.73					.57					3.26
Phillipsburg	...do		.03	T.	T.	.02	.25						.59	.09	.02		1.60	.14					.07			T.	.07	.58	.04				3.50
Sussex	Hudson		.03				1.36						.19	.44	.04	.31	1.48	2.01					.46					.03	.24				6.59
The Red Sandstone Plain.																																	
Boonton‖	Passaic		.02	T.	.02			.05						.95	.01	T.	.07	.73	T.				1.02						.86				3.73
Canoe Brook‖	Essex		.02											1.15	.03		.23	.08					.38						1.00				2.89
Chatham‡	...do		.04	.02										1.06	.02	.02	.21	.12	T.				.40						1.09	.02			3.00
Elizabeth	Coast		.01	T.									.35	.54	.27		.32	.04					.64				T.	.75	.34				3.26
Flemington	Raritan		.08				T.						.42	.30	T	.02	.05	.49									.07	.32	.08				1.83
Jersey City	Coast		T.	T.	T.		T.						.51	.50	.24		.36	T.					.82			T.		.46	1.00				3.89
Lambertville	Delaware		.04		.02								.40	.09	.22	.14	.40	.27								.17	1.60	.42					3.37
Little Falls‖	Passaic		.02	.01	.05			T.						1.06	.02	T.	.23	.26					.54						.94				3.13
New Brunswick	Raritan		.02	T.				T.					.39	.78	.11	T.	.69	.03		T.			.16			T.	T.	1.55	.34				4.07
New Milford‖	Hackensack			.03	.06			.04						.82	.02		.10	.41					.59				.02		.68				2.77
Paterson	Passaic		.02	.03	.01		.22						.47	.51	T.		.19	.30					.78			T		.40	.32				3.25
Plainfield	Raritan		.01				.06						.58	.60	.30		.29	.07					.47			T.	T	1.17	.17				3.72
Ridgefield**	Hackensack		.03	.02			.10							.75	.05		.83	T.	T.				T.			T.		1.60					3.38
Somerville	Raritan		.04										.54	.04	.12	.01	.10	.53					.01				.27	.38	.03				2.07
Verona**	Passaic																																......
Woodcliff Lake‖	Hackensack													.78	.05		.16	.28					.86				.04		.40				2.57
New York, N. Y***	Coast		T.	T.	T.	T.	T.						.95	.03	.21		.38	T.					.74			T.		1.25	.01				3.57
The Southern Interior.																																	
Belleplain	Tuckahoe																																3.99
Bridgeton	Coast						.03						.82	.07	.05	.30	.12	.24	.12	.04								.98	.42				3.19
Burlington	Delaware		.12			.02		.26					.75	.22	.03	2.00	.50	.20	.11									.50	.95				5.66
Camden	..do				T.	.21	.02						1.07	T.	.04	.82	.01	.44		T.							.05	.20	T.				2.86
Clayton	....do																																......
Freehold	Raritan		.02					.01					.43	.77	.05	.11	.59						.03					.20	1.60				3.81
Hammonton	Mullica				.18	.02	T.	.09					.89	.10	.05	1.46	.10	.31	.10										1.12				4.42
Hightstown	Raritan																																.....
Indian Mills	Mullica				.06			.05					.38	.54	.08	.76	.20	.72	.08								T.	1.25	.24				4.36
Lakewood	Metedeconk		T.					.53					.50	.48	.15	.05	1.00	T.		T.			.15					.13	.30				3.29
Moorestown‖	Delaware					.02		.14						1.00	.07		.47		.56	T.								.09	.47				2.82
Northfield	Coast					.41	.18	.39					1.19	.24	.12	T.	.05	1.63	.09	.21								.33	.10				4.94
Pemberton	Delaware					.12		.18					.33	.73	.05	.35	.28	.52	.12				.30					.78	.52				4.28
Pleasantville‖	Coast					T.	.09	.33						1.39	.12		.05	.01	2.25	.15									.24	.13			4.76
Port Norris	Maurice						.57						.67	.84	.10		.21		.22	T.									1.02				3.63
Runyon	Coast		.03										.38	.65	.07		1.64	.08					.21					1.44	.45				4.95
Trenton***	Delaware		.02		.02	T.		.31					.68	.02	.02	.05	.29	.42		T.			T.			T.	.12	1.52	.02				3.49
Trenton No. 2‖	...do		.01	T.		.11		.16					.02	.69	.07	T.	.12	.22	.01								T.	.17	1.61				3.19
Tuckerton	Coast							.21					.70	.32	.04		.22	1.52	.02				.01						.48				3.52
Phila., Pa***	Delaware		T.		T.	T.	.05						.71	.01	.03	.94		1.27		.05							.07	.25	.01				3.39
The Sea Coast.																																	
Asbury Park	Coast		T.		.04		.02	.18					.38	.38	.14	.05	.60						.20				T.	.02	1.36	.02			3.39
tlantic City***	....do				T.	.05	.09	.51					.96	.11	.08	T	.07	1.38	.13									.30	.06		T.		3.74
ape May	...do						.08	T.					.87	.12	.13	.04	.28	.19	.06	.06				T.				.04	1.46				3.33
ong Branch**	....do		T.		T.			.07					.76	.22	.10	.12	.86									T.	T.	1.30	.50				3.93
andy Hook***	....do		T.		T.		T.						.76	.13	.22		.51	.09					.37			T.	T.	1.42	.05				3.55

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Highest			Relative humidity, per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
							Miles per hour	Direction	Date				
tlantic City	29.92	30.24	3	29.47	7	14.8	34	w.	7	79	69	78	60
ong Branch	29.91	30.25	18	29.47	7	......	......	......	......	76	60	78	......
ew York, N. Y	29.90	30.27	18	29.46	7	12.1	40	nw.	23	75	59	63	64
hiladelphia, Pa	29.91	30.25	11	29.49	7	11.4	34	n.	7	69	77	74	65
idgefield	29.90	30.28	18	29.46	7	......	......	......	......	......	......	......	......
andy Hook	29.89	30.27	18	29.45	7	11.4	40	w.	27	76	61	75	66
renton	29.90	30.24	3	29.47	7	9.4	30	w.	23	70	51	62	66

Daily Temperatures for June, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	87	80	85	92	93	93	79	71	78	83	....	77	67	75	88	85	84	74	70	78	82	89	83	80	....	92	91	90	88	....	....	82.7^{c}
	Minimum	52	61	60	62	61	65	62	38	38	45	....	50	55	61	62	67	64	61	56	61	62	66	62	48	....	62	68	68	60	....	....	58.4^{c}
Charlotteburg	Maximum	83	84	80	86	89	89	84	64	74	74	79	80	70	71	87	85	78	68	70	80	79	84	84	70	72	84	87	84	83	83	....	79.5
	Minimum	48	55	55	61	54	59	54	36	38	42	38	41	53	56	56	60	61	58	49	51	50	61	50	41	45	63	62	67	57	57	....	52.6
Dover	Maximum	86	74	83	89	92	89	78	....	....	....	81	68	61	70	85	79	71	66	....	. .	77	86	78	76	72	86	87	85	86	86	....	79.4^{e}
	Minimum	53	67	57	62	65	63	48	39	....	....	43	47	57	57	59	66	62	59	....	....	54	64	59	46	48	63	67	67	59	61	....	57.2^{d}
Layton	Maximum	85	75	81	87	91	81	69	65	76	73	80	69	64	75	86	80	69	75	70	79	78	85	77	73	75	86	84	86	84	84	....	78.1
	Minimum	43	56	57	56	55	58	57	30	39	43	34	41	54	61	60	62	62	54	49	61	56	64	55	38	44	59	64	65	52	57	....	52.9
Long Valley	Maximum	84	77	83	88	90	87	70	65	75	71	80	73	66	72	85	80	76	70	66	78	78	85	76	75	78	89	87	85	83	84	....	78.5
	Minimum	46	57	55	60	57	60	57	36	40	47	44	45	55	58	58	64	64	58	53	53	53	62	60	43	45	60	65	62	59	60	....	54.5
Newton	Maximum	87	79	82	84	98	95	78	69	79	79	87	72	62	73	89	82	73	79	75	84	78	86	85	77	80	88	89	90	90	90	....	82.3
	Minimum	50	56	57	59	60	59	50	36	41	46	43	48	50	55	60	62	62	49	52	58	56	62	55	55	59	62	65	65	58	61	....	55.0
Phillipsburg	Maximum	87	80	85	88	75	91	74	70	78	77	81	68	66	73	85	84	75	73	66	76	79	89	82	79	79	91	89	71	88	90	....	79.6
	Minimum	50	62	60	61	73	65	53	43	44	49	45	53	57	61	61	66	64	60	56	59	63	64	66	50	48	61	67	66	61	64	....	58.4
Sussex	Maximum	86	78	85	88	97	91	78	68	84	71	84	82	64	77	89	84	74	77	72	83	78	88	86	76	76	89	85	87	87	89	....	81.4
	Minimum	50	59	60	60	58	62	58	37	43	47	40	47	53	59	62	63	64	58	50	60	57	65	57	46	50	63	68	68	58	60	....	56.1
The Red Sandstone Plain.																																	
Boonton§§	Maximum	85	79	87	88	91	91	76	69	75	80	79	72	67	76	86	83	76	70	72	80	80	87	84	75	75	88	89	87	85	87	....	80.6
	Minimum	48	59	55	61	58	61	61	36	41	44	41	45	55	58	57	64	61	57	50	51	54	63	63	45	48	59	65	69	58	57	....	54.8
Canoe Brook§§	Maximum	84	76	83	88	90	89	76	66	77	74	80	71	64	74	85	83	79	73	69	80	81	86	78	75	79	87	90	87	85	86	....	79.8
	Minimum	49	56	52	63	55	61	56	31	38	44	35	44	56	58	56	65	63	56	50	49	54	63	63	40	42	57	65	69	55	56	....	53.4
Elizabeth	Maximum	89	81	87	91	95	....	93	70	81	89	85	73	66	73	87	85	76	70	70	83	85	90	86	77	86	90	95	91	90	90	....	83.6^{a}
	Minimum	52	63	57	65	63	....	54	40	39	51	46	52	57	60	60	66	64	63	56	53	58	64	65	46	49	64	69	72	62	63	....	57.7^{a}
Flemington	Maximum	89	82	85	89	92	91	78	72	78	78	82	75	66	74	87	83	78	70	67	76	81	91	85	81	85	93	90	89	89	91	....	82.2
	Minimum	49	61	57	62	65	65	62	43	42	50	44	52	57	60	60	66	64	60	55	55	57	61	66	46	48	61	66	71	62	63	....	57.7
Jersey City	Maximum	87	77	84	89	92	90	74	70	77	75	82	74	69	72	84	85	78	70	70	80	81	88	80	77	81	86	90	87	87	87	....	80.8
	Minimum	56	61	61	64	70	65	56	46	53	58	56	56	59	59	60	64	64	59	54	56	63	65	57	51	60	70	71	70	67	68	....	60.6
Lambertville	Maximum	84	77	81	86	88	87	73	66	74	75	79	71	65	71	82	80	80	70	64	81	85	78	73	83	91	87	85	82	84	85	....	78.9
	Minimum	53	63	59	61	66	65	61	40	47	61	49	55	59	59	62	65	64	55	54	60	65	64	47	50	66	68	69	60	62	66	....	59.1
Little Falls§§	Maximum	88	80	86	92	95	93	75	69	78	78	83	75	65	76	88	83	73	71	75	83	83	88	81	78	84	89	91	90	88	88	....	82.2
	Minimum	56	61	57	64	61	63	60	37	44	48	44	48	56	58	59	66	63	60	52	52	57	63	64	47	47	61	66	70	61	60	...	56.8
New Brunswick	Maximum	85	82	83	88	90	89	81	67	77	75	80	75	64	73	82	81	78	70	66	78	72	87	85	78	82	90	89	86	84	87	....	80.5
	Minimum	53	63	58	63	64	64	63	40	46	54	45	52	56	59	60	65	64	60	56	51	59	64	67	49	52	66	69	71	64	63	....	58.7
Paterson	Maximum	86	83	83	87	91	90	73	67	77	76	82	76	64	73	87	80	76	75	73	83	81	87	84	77	75	86	90	87	85	87	....	80.7
	Minimum	54	65	61	65	65	65	62	43	50	54	49	53	57	59	61	66	64	62	56	56	59	65	64	49	55	64	70	70	65	65	....	59.8
Plainfield	Maximum	88	77	86	90	93	92	74	70	78	77	82	74	70	72	85	85	79	69	71	81	82	89	80	77	81	87	92	88	87	88	....	81.5
	Minimum	53	59	56	64	62	63	56	39	44	49	47	52	59	59	59	64	63	59	53	51	56	63	55	47	51	64	67	69	62	61	....	56.9
Ridgefield	Maximum	86	74	84	90	91	90	72	65	72	76	80	74	64	74	85	77	70	67	71	81	82	86	79	75	76	87	91	88	86	88	...	79.4
	Minimum	55	62	60	65	63	64	45	41	49	59	46	55	56	59	61	65	64	57	54	54	60	64	54	48	54	63	70	70	62	67	....	58.2
Somerville	Maximum	88	82	86	92	96	94	77	70	78	80	88	64	66	74	87	84	76	73	69	79	84	90	83	78	86	93	93	90	88	92	....	82.9
	Minimum	47	60	57	63	63	64	60	34	40	51	43	50	58	60	62	66	66	60	55	58	55	62	65	44	51	61	68	71	60	62	....	57.2
Verona	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	84	74	79	86	88	87	72	64	73	71	76	70	65	70	80	82	75	69	68	79	78	85	77	74	79	83	86	84	83	84	....	77.5
	Minimum	56	61	61	65	70	66	50	47	54	59	56	56	58	59	60	64	64	55	54	57	63	65	57	52	60	71	71	70	68	68	....	60.6
The Southern Interior.																																	
Belleplain	Maximum	83	85	....	85	89	87	80	68	75	80	....	78	70	....	82	. .	84	68	70	80	81	88	75	85	92	....	....	92	86	87	....	81.2^{f}
	Minimum	50	60	....	50	62	66	61	36	44	49	....	43	61	....	71	....	64	58	58	51	50	62	43	51	71	....	....	72	67	73	....	57.2^{f}
Bridgeton	Maximum	85	85	84	87	92	90	87	70	78	80	80	69	69	73	85	83	85	68	69	80	81	89	84	78	88	94	92	85	86	88	....	82.1
	Minimum	51	60	58	62	63	66	63	45	52	54	51	59	59	60	62	65	65	59	57	54	55	67	71	50	55	71	72	71	66	64	....	60.2
Burlington	Maximum	87	88	86	91	93	92	87	72	79	80	80	74	69	73	85	88	85	74	72	79	84	89	95	83	84	92	92	88	87	90	....	83.9
	Minimum	46	64	56	62	68	65	66	44	50	53	51	58	43	57	65	63	66	62	54	60	57	66	69	50	51	72	69	72	66	64	....	59.6
Camden	Maximum	88	82	88	90	94	94	79	71	80	80	81	69	68	76	90	87	82	71	69	79	85	91	84	79	88	96	91	87	88	91	....	83.3
	Minimum	56	65	59	64	68	68	54	49	54	57	54	59	60	60	64	68	66	59	58	53	59	67	61	54	54	70	71	73	66	67	....	61.2
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	87	86	86	86	90	91	82	68	79	77	78	71	66	71	84	83	79	80	72	80	84	89	89	82	83	89	92	86	86	88	....	82.1
	Minimum	50	63	57	63	65	63	64	40	50	53	46	53	57	59	58	65	60	53	55	60	56	64	68	46	50	61	69	70	63	62	....	58.1
Hammonton	Maximum	89	86	85	91	94	93	85	72	79	84	83	75	71	75	90	84	87	68	74	81	84	90	84	78	89	95	94	87	87	87	....	84.0
	Minimum	49	63	52	60	62	64	50	48	50	50	50	45	58	58	58	65	68	58	55	52	52	64	67	44	49	69	71	70	62	62	....	57.5
Indian Mills	Maximum	86	79	86	91	90	90	79	70	82	79	81	72	71	73	84	85	81	70	71	79	85	89	84	77	89	96	92	86	86	89	....	82.4
	Minimum	48	59	52	62	63	65	60	38	43	52	45	56	60	60	59	67	65	60	57	54	52	65	69	46	57	69	72	70	65	61	....	58.4
Lakewood	Maximum	84	79	86	88	88	90	84	69	78	77	77	71	67	73	83	81	80	69	67	78	80	88	87	80	84	87	91	8[illegible]	86	88	....	80.9
	Minimum	53	60	55	63	65	63	64	40	45	53	48	53	61	59	58	66	66	60	57	54	55	64	69	47	49	67	70	71	65	63	....	58.8
Moorestown	Maximum	85	80	84	88	90	89	77	68	77	78	81	69	68	73	85	82	81	70	69	77	82	88	82	76	86	93	91	84	87	88	....	80.9
	Minimum	53	63	56	62	65	67	48	42	50	52	49	56	59	60	63	67	64	58	56	53	56	66	57	47	53	68	69	71	64	63	....	58.6
Pemberton	Maximum	85	84	84	89	90	90	85	68	77	78	81	69	69	73	87	85	84	70	70	80	84	87	86	81	85	92	88	87	86	87	....	82.0
	Minimum	51	62	54	61	65	67	55	43	47	52	51	58	60	62	60	67	65	62	58	55	54	67	70	50	52	68	71	72	65	65	....	59.6
Pleasantville§§	Maximum	83	77	81	86	85	91	80	72	73	81	72	70	70	69	71	81	82	72	67	75	76	90	83	76	82	95	90	83	84	89	....	79.5
	Minimum	49	56	55	61	62	65	63	40	46	50	47	62	62	61	61	65	65	60	58	55	54	66	66	45	54	69	71	72	66	64	....	59.0
Runyon	Maximum	81	80	86	91	93	93	80	72	79	80	82	77	79	42	85	83	80	77	71	82	85	89	85	86	84	89	91	91	88	89	....	83.8
	Minimum	54	55	57	52	54	56	48	30	35	38	36	45	54	56	54	56	52	61	53	49	53	62	66	42	40	59	65	69	58	56	....	52.2
Trenton	Maximum	81	81	83	87	90	88	76	67	76	75	80	70	66	73	84	85	80	68	67	77	83	87	79	75	84	92	89	87	84	87	....	80.1
	Minimum	56	65	60	63	68	68	51	44	52	57	55	55	59	60	63	67	63	57	55	55	61	67	59	52	57	70	70	71	67	67	....	60.5
Tuckerton	Maximum	85	85	84	88	90	95	88	84	78	85	74	73	70	71	80	80	85	70	75	78	75	90	90	80	85	95	90	85	85	92	....	82.8
	Minimum	50	60	55	60	60	68	60	34	50	50	50	60	60	55	60	61	65	60	60	60	60	60	58	55	60	70	60	68	65	60	....	58.5
Philadelphia, Pa.	Maximum	85	81	82	86	90	90	78	64	76	77	81	69	68	74	35	83	81	74	69	77	82	90	82	77	85	92	87	85	86	89	....	81.0
	Minimum	60	68	63	65	71	71	55	50	56	64	61	58	60	63	65	69	68	61	59	58	64	70	61	57	63	72	74	74	72	71	....	64.1
The Sea Coast.																																	
Asbury Park	Maximum	72	69	72	83	80	82	77	68	73	76	69	66	66	65	70	71	74	66	63	68	70	88	81	76	72	77	90	83	78	87	....	74.4
	Minimum	56	57	59	60	63	64	60	44	51	59	54	58	61	60	60	63	64	59	57	56	61	65	69	51	56	69	69	69	71	68	....	60.4
Atlantic City	Maximum	73	72	71	70	81	88	81	67	68	80	70	66	67	66	72	75	76	65	64	64	74	90	82	76	75	87	78	78	78	88	....	75.1
	Minimum	58	60	62	60	64	66	54	46	58	58	56	63	62	61	62	66	65	59	59	58	61	68	64	55	62	69	69	71	70	71	....	61.9
Cape May	Maximum	76	73	76	77	86	89	82	71	71	81	74	69	71	72	75	78	83	64	66	75	76	90	82	76	80	88	88	82	....	....	...	77.5^{b}
	Minimum	56	60	60	62	62	65	53	46	56	56	54	62	63	62	62	64	64	60	60	56	56	66	63	51	61	72	70	72	. ..	....	....	60.5^{b}
Long Branch	Maximum	79	73	78	86	82	87	83	66	71	80	73	67	66	70	78	84	75	66	70	79	80	90	84	76	77	86	93	84	86	89	....	78.6
	Minimum	56	59	60	60	63	60	50	39	53	57	53	56	55	56	58	60	60	50	51	55	60	60	60	53	60	70	70	69	66	70	....	58.3
Sandy Hook	Maximum	82	69	81	84	84	87	72	65	75	74	73	68	64	66	77	75	74	67	62	73	73	84	78	73	79	80	87	85	83	86	....	76.0
	Minimum	58	59	59	65	64	63	55	50	56	61	60	58	60	60	61	63	64	58	57	55	63	65	59	54	60	69	70	71	68	70	...	61.2

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.208	.304	.272	.288	.154	.250	.320	.304	.288	.288	.304	.110	.072	.128	.130	.250	.330	*	.166	.240	.192	.320	.320	.320	.288	.326	.208	.098	.304	.288	....	7.064
	Wind movement	63	43	42	78	54	38	47	101	42	73	58	72	48	64	26	50	48	69	101	51	26	57	64	74	77	70	49	71	25	47	....	1728
Runyon	Evaporation	.210	090	.210	.240	.240	.240	.240	.220	.240	.220	.210	.200	.030	.010	.120	.200	.180	.120	.140	.240	.240	.270	.280	.270	.240	.120	.210	.150	.240	.240	....	5.860
	Wind movement	15	14	13	47	17	22	12	21	25	21	31	21	11	10	9	20	14	50	29	19	12	82	39	43	29	7	15	13	10	10	. .	632

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. JULY, 1932. No. 7.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

There were no outstanding characteristics in the temperature record for the month, the State average being quite close to the normal. Somewhat cool weather prevailed from the 2d to the 6th inclusive, and moderately warm from about the 9th to 14th, inclusive. The highest temperatures were recorded mostly on the 1st, 13th and 19th, and were generally in the low nineties, while the lowest were registered in the fifties on the 3d, 25th and 31st.

The rainfall for the month averaged 60% of the normal for the State as a whole, but the individual amounts ranged widely even for stations in the same sections, as is not unusual at this season of the year. In general, the northern two-thirds of the State received the lesser amounts and the southern one-third the greater. During the first half of the month there were about three days with rain,-two to three in the southern part and three to four in the northern, while during the latter half there were four to six rainy days in the southern district and three to five in the northern part. The heaviest general rains came mostly during the 21st-23d and the 28-29th, with lighter amounts somewhat general on the 2d, 4th and 6th.

At the close of the month conditions were not entirely satisfactory from the crop standpoint. The soil was too dry in most sections, and there was rather steady deterioration in pastures and the later maturing crops. No destructive wind or hail storms were reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 73.8°, which was 0.3° above normal. The highest temperature was 98° at Camden on the 1st, and the lowest, 41°, at Long Valley on the 25th. The greatest daily range of temperature was 46° at Newton on the 15th. The highest monthly mean temperature was 77.2° at Burlington, and the lowest, 70.1° at Layton.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +2.7°; Red Sandstone Plain, +2.2°; Southern Interior, +2.4°; Sea Coast, +2.6°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 2.76 inches, which was 1.87 inches below normal. The greatest monthly precipitation was 5.54 inches, at Sussex, and the least, 0.82 inch at Jersey City. The greatest amount of precipitation in any 24 consecutive hours was 3.11 inches at Sussex on the 2d. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1932, to date, by sections, is: The Highlands. —3.71 inches; Red Sandstone Plain, —5.09 inches; Southern Interior, +1.03 inches; Sea Coast, —2.02 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 11 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 50 miles per hour from the northeast at Atlantic City on the 17th.

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MISCELLANEOUS.

The per cent of possible sunshine was 71, or 8 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.85 inches, or 0.15 inch below normal. The highest reading was 30.11 inches at Trenton on the 12th, and the lowest 29.33 inches at Sandy Hook on the 2d.

The mean stage of the Delaware River at Phillipsburg was 1.3 feet, and the highest 2.7 feet on the 7th. The mean stage at Trenton was 0.8 foot, and the highest 1.6 feet on the 7th.

Thunderstorms occurred on the following dates: 1, 2, 4, 17, 18, 20, 21, 22, 23, 24, 27, 28 and 29. Dense fog was noted at Trenton on the 28th, and at Atlantic City on the 28th and 29th. Hail fell in scattered places in the State on the 17th, 18th, 22d, 23d, 27th and 29th. It was mostly light and no damage was reported.

COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	75.2	100	44	3.50	7.28	1.29	......	......	......	......
1886	73.0	98	48	4.91	7.95	2.98	......	......	......	......
1887	77.1	102	54	7.67	15.29	1.95	......	......	......	11
1888	71.1	95	45	3.50	7.03	1.25	......	......	8	9
1889	73.4	95	48	10.19	18.58	4.66	......	......	13	14
1890	72.5	101	39	5.62	7.55	3.60	12	11	8	9
1891	**70.1**	95	43	5.30	9.41	3.03	10	11	10	12
1892	74.3	105	44	4.03	7.96	2.38	12	14	5	8
1893	73.9	102	40	2.72	4.63	1.26	14	13	4	8
1894	75.7	106	44	1.66	5.00	**0.15**	14	12	5	6
1895	70.9	99	41	4.26	7.73	1.53	12	12	7	10
1896	75.0	98	47	5.50	13.29	2.45	13	10	8	13
1897	74.1	102	50	**11.42**	**20.80**	6.11	10	11	10	15
1898	75.3	**107**	38	4.96	11.72	2.23	11	13	7	10
1899	74.7	98	38	5.75	9.02	3.34	13	11	7	11
1900	75.9	104	42	4.74	7.21	1.11	15	12	4	11
1901	**77.3**	**107**	45	5.87	10.92	1.89	9	13	9	14
1902	73.0	100	43	4.78	9.92	1.83	10	12	9	13
1903	73.3	100	38	5.51	10.14	3.08	16	10	5	12
1904	72.3	98	42	4.87	8.06	2.41	13	10	8	13
1905	74.4	102	42	4.06	8.19	1.67	12	13	6	12
1906	72.8	94	46	5.58	13.25	3.44	11	14	6	12
1907	73.6	96	40	2.62	6.42	0.95	8	12	11	8
1908	75.6	106	42	4.70	8.12	1.97	12	13	6	9
1909	71.6	99	36	2.12	4.03	1.03	14	14	3	5
1910	75.3	99	42	**1.36**	5.33	0.22	12	12	7	5
1911	76.0	104	42	3.64	6.46	2.06	12	12	7	8
1912	73.7	100	36	3.86	9.91	1.01	14	10	7	9
1913	74.4	100	41	2.52	4.72	1.50	20	9	2	8
1914	71.5	97	40	6.05	8.57	1.94	9	11	11	15
1915	72.8	98	44	5.31	11.06	2.23	10	13	8	14
1916	74.4	97	45	5.40	9.01	3.15	11	9	11	12
1917	74.2	104	46	4.83	7.93	2.38	10	11	10	12
1918	72.2	104	39	3.93	13.60	1.20	17	9	5	8
1919	73.5	103	43	8.39	14.14	4.45	14	7	10	14
1920	71.7	96	42	5.76	16.25	1.20	17	10	4	11
1921	76.5	99	43	3.62	7.36	1.66	14	9	8	10
1922	73.0	98	44	5.79	9.26	2.29	13	9	9	13
1923	71.9	102	40	3.88	6.28	0.93	15	8	8	11
1924	71.6	98	41	2.59	5.08	0.84	19	8	4	6
1925	72.0	99	39	7.37	10.09	4.03	15	9	7	13
1926	73.0	105	40	5.46	8.51	1.29	16	7	8	12
1927	72.7	99	36	6.06	9.34	2.95	13	10	8	11
1928	74.2	96	41	6.86	10.22	2.21	16	8	7	12
1929	73.0	102	**33**	1.64	**3.93**	0.51	17	9	5	6
1930	74.3	105	42	3.98	6.45	1.85	16	9	6	10
1931	76.6	102	50	4.24	7.55	0.80	13	10	8	11
1932	73.8	98	41	2.76	5.54	0.82	19	8	4	8
Normal	73.5	....	....	4.63	....	....	13	11	7	10
Extremes	....	107	33	....	20.80	0.15	......	......	......	......

W. B. O. Philadelphia-8-26-32-830.

Climatological Data for July, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	74.4ᵃ	+1.2	97	13	50	31	36	3.29	−1.69	1.15	0	8	24	3	4	......	Miss C. S. Hixson.
Charlotteburg††	Passaic	719	40	70.8	+0.8	91	21	43	31	43	1.61	−3.22	0.55	0	8	25	1	5	w.	Newark Water Dept.
Culvers Lake††	Sussex	848	31	......	......	......	......	50	31	....	2.01	−2.56	0.73	0	4	25	3	3	nw.	Brice E. Riker.
Dover	Morris	600	48	72.0ᵃ	+0.6	92	13†	47	31	36	2.80	−2.47	1.04	0	11	3	23	5	......	William C. Harris
Layton	Sussex	480	31	70.1	−0.8	92	13	45	15†	40	2.62	−1.64	1.52	0	5	15	7	9	w.	A. M. Depue.
Long Valley	Morris	520	1	71.0	......	91	13	41	25	44	2.87	......	1.50	0	8	25	4	2	w.	S. N .Dilts.
Newton	Sussex	769	48	73.4	+0.9	97	20	49	25	46	3.50	−1.46	1.30	0	10	13	12	6	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	73.8	−0.3	96	13	50	31	38	3.75	−1.10	1.98	0	8	17	9	5	......	Town Engineer.
Sussex	Sussex	442	37	73.2ᵃ	+1.1	96	21	50	15†	41	5.54	+1.14	3.11	0	6	20	3	8	......	A. J. W. Mowatt
Means and extremes	......	......	....	72.3	+0.5	97	13†	41	25	46	3.11	−1.62	3.11	0	8	19	7	5	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	72.4	−0.1	91	1†	46	31	40	2.08	−2.82	1.09	......	5	20	2	9	nw.	John Kline.
Canoe Brook	Essex	173	2	70.5	......	92	1†	45	25†	41	2.65	......	0.85	......	8	22	6	3	w.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	2.79	−1.65	0.90	......	8	28	1	2	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	75.6ᵈ	+0.3	96ᵈ	11†	53	25†	38	1.35	−3.81	0.53	0	8	25	4	2	nw.	Union County Park Com.
Flemington	Hunterdon	140	§46	75.2	+0.6	95	1†	51	31	39	1.93	−3.29	0.45	0	10	24	6	1	sw.	Hiram E. Deats.
Jersey City	Hudson	10	34	75.4	−0.7	91	1†	58	3†	27	0.82	−3.62	0.24	0	7	12	15	4	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	72.7	−1.6	92	14	53	1	37	2.41	−2.41	0.81	0	9	24	3	4	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	73.9	+0.1	95	13†	49	31	39	1.69	−2.70	0.80	0	6	22	4	5	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	74.4	+0.4	92	13	53	31	32	1.49	−3.55	0.45	0	9	19	10	2	sw.	N. J. Experiment Station
New Milford††	Bergen	......	14	......	......	......	......	......	......	....	1.64	......	0.82	......	5	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	75.6	+1.2	93	1†	55	25†	32	1.48	−3.54	0.64	0	9	15	11	5	nw.	Philip Del Vecchio.
Plainfield	Union	120	44	73.6	−0.4	94	13	50	31	37	1.73	−4.10	0.56	0	8	14	13	4	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	73.8	......	93	20	53	31	33	2.88	......	0.90	0	8	18	10	3	nw.	George P. Kirsten.
Somerville, near	Somerset	70	49	74.7	+0.6	97	1	50	31	38	3.07	−2.04	1.21	0	9	16	10	5	nw.	Julius Gerlich.
Woodcliff Lake††	Bergen	100	14	......	......	......	......	......	......	....	1.24	......	0.86	......	3	.. .	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	62	73.9	+0.1	88	1	58	5	22	0.85	−3.39	0.27	0	7	10	17	4	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.0	0.0	97	1	45	25	41	1.95	−3.05	1.21	0	7	20	7	4	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	73.0ᵇ	−0.8	92	1	50	25†	33	4.14	+0.03	......	......	....	8	11	12	w.	A. F. Waldron.
Bridgeton	Cumberland	30	49	75.8	−0.9	94	1	57	31†	31	3.67	−0.82	1.32	0	8	21	7	3	sw.	Bennett K. Matlack
Burlington	Burlington	12	§46	77.2	+2.2	95	14	58	20	36	3.45	−1.29	0.93	0	10	17	11	3	sw.	Public Service Power Co.
Camden	Camden	20	....	76.8	......	98	1	57	25	34	2.19	......	0.89	0	8	11	15	5	s.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	75.6ᵃ	+0.6	93	1†	54	25	36	2.34	−2.51	0.60	0	6	22	7	2	nw.	G. E. Lamb.
Freehold	Monmouth	194	¶27	74.4	......	94	13	52	6	33	3.71	−1.41	1.00	0	9	24	5	2	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	73.5	......	95	19	51	15†	41	4.74	+0.03	1.74	0	9	16	13	2	sw.	Mrs. Annie C. Measley.
Hightstown	Mercer	128	38	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. Elwood Croshaw.
Indian Mills††	Burlington	76	43	73.5	−1.2	95	13	51	3†	38	3.22	−1.44	1.51	0	7	13	15	3	sw.	James M. Armstrong.
Lakewood	Ocean	54	28	74.2	+1.4	95	13	51	31	37	1.80	−3.05	0.96	0	7	24	4	3	nw.	R. W. Holman.
Moorestown	Burlington	......	69	74.2	−0.5	93	1†	54	25	34	2.78	−1.90	1.20	0	7	25	0	6	nw.	Japanese Beetle Laboratory.
Northfield††	Atlantic	25	25	......	......	......	......	......	......	....	4.75	+1.15	1.24	0	10	....	..	....	......	William L. Flick.
Pemberton	Burlington	55	2	75.4	......	96	14	55	25†	31	3.22	......	1.16	0	8	16	10	5	w.	Charles S. Beckwith.
Pleasantville††	Atlantic	11	§34	73.2	......	92	11	52	31	32	4.75	+0.77	1.35	......	9	20	8	3	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	3.22	......	1.10	0	7	21	5	5	sw.	S. T. Garrison.
Runyon††	Middlesex	18	8	72.6	......	94	13	45	25	43	2.24	......	0.85	......	8	23	7	1	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	74.6	+0.1	93	1	58	3	28	3.63	−0.31	1.09	0	8	8	15	8	nw.	U. S. Weather Bureau,
Trenton No. 2	Mercer	105	7	1	......	......	......	......	......	....	3.61	......	1.31	0	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	74.0	−0.1	95	1	50	25†	39	3.46	−0.42	1.05	0	11	12	15	4	sw.	John H. Brown.
Philadelphia, Pa	......	117	61	77.3	+1.1	93	1	62	5	21	2.25	−1.90	1.25	0	8	12	12	7	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	74.5	+0.1	98	1	45	25	43	3.38	−0.86	1.74	0	8	18	9	4	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	73.4	+1.0	90	19	60	3†	26	1.88	−2.66	0.58	0	7	28	1	2	sw.	Information Bureau.
Atlantic City	Atlantic	16	59	73.6	+1.5	90	11	61	3	23	4.21	+0.28	1.25	0	9	9	14	8	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	73.8	+1.7	91	19	53	25	29	1.74	−3.18	0.80	0	10	16	12	3	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	74.4	+0.7	88	10	62	5	21	0.93	−4.19	0.41	0	8	14	13	4	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.8	+1.2	91	19	53	25	29	2.19	−2.44	1.25	0	8	17	10	4	sw.	
For the State	......	......	....	73.8	+0.3	98	1	41	25	46	2.76	−1.87	3.11	0	8	19	8	4	sw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for July, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		.10		.60		.15											1.15				.10	.39	.75				.05					3.29
Charlotteburg	Passaic		.40		.50	.05	.01																.15	.48				.01	.01				1.61
Culvers Lake	Delaware		.73	.30	.35		T.											T					.63	T.								T.	2.01
Dover	Passaic	.80	.10		.42		.04											.23			.04		.80	.24				.11		.01		.01	2.80
Layton	Delaware	.48	.02		.58																		1.52	.02								T.	2.62
Long Valley	Morris		1.50		.41	.08	.14											.41				.06	.14	T				.13	T.			T.	2.87
Newton	Delaware	1.30	.10		.53		.02											.31			.03		.34	.19					.34	T.		.34	3.50
Phillipsburg	...do	.40	.23		.48		.23											T.			T.	.23	1.98	.14				.06				T.	3.75
Sussex	Hudson	.07	3.11		.56																		.09	1.69								.02	5.54
The Red Sandstone Plain.																																	
Boonton ‖	Passaic		1.09			.40													.10					.45	.04								2.08
Canoe Brook ‖	Essex		.85		.04	.41	T.	.05											.08		T.		.05	.49				T.	.68				2.65
Chatham ‖	...do		.90			.47		.09											.10		.02		.10	.55					.56				2.79
Elizabeth	Coast		.02		.29	.02	.02		T.						T.			.05				T.	T.	.40				.02		.53			1.35
Flemington	Raritan		.08		.30	.12	.33											.21				.08	.21	.45				.13		.02		T.	1.93
Jersey City	Coast	T.	.10		.24		T.							T.	T.						.01		.10	.05				.12		.20		T.	0.82
Lambertville	Delaware		.02		.24		.17		T.			.01						T.				.18	.17	.72				.81		.09		T.	2.41
Little Falls ‖	Passaic		.80	T.		.34		T											.07				T.	.38				.02	.08				1.69
New Brunswick	Raritan		.12		.13	.13	.08												.45		T.	T.	T.	.39				.03	.13	.03			1.49
New Milford ‖	Hackensack		.82			.26		.03																.48					.05				1.64
Paterson	Passaic		.64	T.	.20	.05	.01											T.			T.		.42	.09				.01	.04	T.		.02	1.48
Plainfield	Raritan	.12			.42		.06							T.				.02			.05	T.	.56	T.				.16		.34		T.	1.73
Ridgefield**	Hackensack	T.	.90		.31		.01											T.					.38	.03				.65		.57		.03	2.88
Somerville	Raritan		.05		.33	.10	.16											1.21					.46	.36				.29		.11			3.07
Woodcliff Lake ‖	Hackensack		.86																					.36					.02				1.24
New York, N. Y***	Coast	.09	.01		.27		T.							T.				T.			.01		.14	T.				.13		.20		T.	0.85
The Southern Interior.																																	
Belleplain	Tuckahoe																																4.14
Bridgeton	Coast				.41		.27		.03								T.				.23		.12	1.27					1.32	.02			3.67
Burlington	Delaware				.15	T.	.07												.30		.10	.87	.25	.20	.33				.25	.93			3.45
Camden***	..do				.17		.18	T.				T.	T.		T.						.03	.32	.88	.01				.37		.23			2.19
Clayton	...do						.44								.20							.30		.60					.20	.60			2.34
Freehold	Raritan				.12		.16												1.00			.06		.86	.10				.25	.56	.60		3.71
Hammonton	Mullica				.28		.16											T.	.01		.02	.82	T.	1.74	.12			.39	T.	1.20			4.74
Hightstown	Raritan																																
Indian Mills	Mullica				.30		.20													.05			.08	1.51				.28		.80			3.22
Lakewood	Metedeconk				.16		.05												.96			.06		.28					.06	.23			1.80
Moorestown ‖	Delaware					.18	T.	.14														.47	.05	1.20					.39	.35			2.78
Northfield	Coast				.59		.06					.15							1.22		.10	.08		1.24	.04				1.05	.22			4.75
Pemberton	Delaware				.22		.12												.80			1.16	.06	.09					.51	.26			3.22
Pleasantville ‖	Coast					.58	T.	.02					T.						1.10		.06	.37		.79	.56				.79	.48			4.75
Port Norris	Maurice				.60		.16													.30		.60		1.10					.41	.05			3.22
Runyon	Coast		.20		.15	.16	.13												.47					.85					.12	.16			2.24
Trenton***	Delaware	.04			.18		.22	T.				T.		T.				.22			T.	1.05	.28	T.				.85		.79		T.	3.63
Trenton No. 2 ‖	...do		.11		T.	.20	.04	.23											.15		T.	.21	.42	.20	T.				.74	1.31			3.61
Tuckerton	Coast				.25		.04		.02										.71		.04	.31	.28	.11	.22				1.05	.43			3.46
Phila., Pa***	Delaware				.15		.15					T.	T.								.40	.42	1.18	.07				.19		.05			2.25
The Sea Coast.																																	
Asbury Park	Coast		T.		.17		.30											.15					.02	.31				.58		.35			1.88
Atlantic City***	...do				.51		.06					.34						.96			.05	.31	T	1.25				.50		.23			4.21
Long Branch**	...do	.06	.07		.16	.10	.12											.10			.04		.70	.10				.16		.13			1.74
Sandy Hook***	...do	.28			.11		.05		T					T.				T			.02		.04	T				.41		.01		.01	0.93

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip- tation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	29.87	30.09	10	29.37	2	13.9	50	ne.	17	75	65	74	61
Long Branch	29.86	30.10	13	29.37	2					73	57	63	
New York, N. Y	29.84	30.09	13	29.35	2	13.9	50	nw.	2	71	51	59	78
Philadelphia, Pa	29.87	30.12	13	29.37	2	11.9	38	n.	22	65	47	53	72
Ridgefield	29.84	30.10	13	29.35	2								
Sandy Hook	29.84	30.09	13	29.33	2	12.6	37	s.	27	73	57	70	75
Trenton	29.86	30.11	12	29.35	2	9.9	37	nw.	29	66	49	59	77

Daily Temperatures for July, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	92	85	82	81	84	72	90	85	89	93	80	83	97	91	88	86	92	92	....	88	91	83	93	83	87	89	91	92	85	79	78	87.1[a]
	Minimum	60	65	53	62	54	51	63	63	59	59	66	62	65	72	79	53	64	57	....	69	70	66	69	56	51	57	68	67	63	55	50	61.6[a]
Charlotteburg	Maximum	89	88	76	76	78	78	84	82	83	86	84	81	90	90	88	85	87	81	88	88	91	90	87	86	84	88	89	90	88	82	82	85.1
	Minimum	52	62	52	58	52	48	60	62	60	60	67	60	60	68	45	46	53	62	51	63	67	52	58	56	44	50	63	64	56	57	43	56.5
Dover	Maximum	90	80	78	78	81	71	84	82	86	88	84	81	92	92	87	89	86	82	83	91	89	78	88	....	88	85	87	89	84	77	82	84.6[a]
	Minimum	57	60	53	61	55	53	61	65	60	61	67	61	62	68	52	53	61	61	55	62	68	65	62	49	....	55	65	66	62	57	47	59.5[a]
Layton	Maximum	90	75	77	80	80	72	85	82	84	88	81	81	92	88	85	84	88	83	88	88	89	80	88	77	87	85	86	90	82	75	83	83.6
	Minimum	54	63	52	58	52	50	58	60	55	53	65	58	60	69	45	47	64	58	50	66	65	62	58	52	47	54	65	62	57	51	45	56.6
Long Valley	Maximum	90	84	76	78	80	71	84	80	84	88	83	79	91	90	83	78	83	81	88	85	87	81	88	82	85	87	88	88	83	78	84	83.5
	Minimum	56	62	54	57	53	52	60	61	57	53	65	61	61	70	52	62	60	60	53	65	67	65	62	53	41	59	65	64	59	56	45	58.4
Newton	Maximum	94	73	80	77	84	71	91	87	89	96	91	88	96	96	96	96	91	85	93	97	93	79	94	81	91	90	89	92	89	81	87	88.3
	Minimum	58	58	51	59	50	55	59	60	55	60	65	58	59	70	50	55	63	58	61	66	66	65	59	54	49	58	62	62	62	54	50	58.4
Phillipsburg	Maximum	93	75	81	82	82	70	87	83	89	91	88	85	96	92	87	86	91	88	93	85	89	83	90	75	87	88	89	91	85	79	88	86.1
	Minimum	60	63	56	62	54	58	65	62	61	58	69	65	65	72	55	60	65	61	56	70	70	64	64	57	52	57	68	66	64	56	50	61.5
Sussex	Maximum	90	85	79	80	81	....	87	82	86	90	81	81	95	90	88	89	90	83	87	89	96	90	89	84	91	89	89	92	93	80	84	87.0[a]
	Minimum	57	63	52	60	52	....	54	63	57	58	67	60	59	71	50	55	63	62	58	68	68	67	60	56	50	56	65	64	60	58	50	59.4[a]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	91	78	78	80	80	71	85	86	86	87	91	87	89	90	87	85	90	83	88	90	90	79	91	79	86	88	89	89	90	80	86	85.5
	Minimum	57	65	57	62	63	53	61	65	62	58	70	63	58	66	51	52	59	51	53	66	68	64	60	60	50	53	62	62	61	53	46	59.4
Canoe Brook§§	Maximum	92	76	76	80	80	73	85	81	85	90	84	82	92	89	85	81	89	82	89	89	89	80	90	79	86	88	91	90	85	76	83	84.4
	Minimum	56	64	53	55	52	51	57	65	53	53	67	63	53	69	46	50	59	56	50	65	66	65	60	50	45	52	65	61	59	51	45	56.6
Elizabeth	Maximum	....	....	....	....	80	83	86	90	88	90	96	92	91	92	87	83	88	86	92	93	91	80	93	83	91	96	93	95	89	81	88	88.8[d]
	Minimum	....	68	55	61	57	59	60	67	58	62	70	65	62	75	57	63	64	62	57	68	70	69	64	60	53	60	67	66	67	57	53	62.5[a]
Flemington	Maximum	95	89	85	82	85	81	88	86	90	92	90	83	95	93	88	88	92	86	93	90	92	85	91	82	90	88	92	92	89	80	90	88.5
	Minimum	60	67	56	62	56	57	62	65	63	63	68	64	65	74	57	59	63	63	56	70	69	64	63	58	53	57	68	64	66	57	51	61.9
Jersey City	Maximum	91	80	79	81	82	73	83	83	86	91	87	84	91	91	87	81	86	84	89	90	91	79	90	80	87	87	90	91	88	79	85	85.4
	Minimum	67	63	58	62	58	62	62	65	63	67	69	65	67	76	64	64	68	67	63	70	71	67	68	62	60	66	69	68	68	64	62	65.3
Lambertville	Maximum	90	77	77	77	80	78	82	80	84	89	84	82	90	92	86	83	91	84	91	80	89	81	90	81	85	85	90	87	83	76	82	84.1
	Minimum	53	60	54	62	55	57	64	63	60	65	67	59	65	57	63	61	65	64	60	69	67	63	62	57	55	61	66	67	67	57	55	61.3
Little Falls§§	Maximum	94	78	80	81	83	74	88	85	88	92	87	86	95	94	89	85	90	86	91	93	95	90	92	76	89	90	91	93	89	81	86	87.1
	Minimum	59	65	56	60	55	55	58	66	61	60	71	64	58	72	53	55	62	62	55	66	69	65	62	65	50	57	66	65	63	57	49	60.7
New Brunswick	Maximum	91	89	79	79	80	77	84	84	87	90	87	82	92	90	87	84	88	84	90	88	86	82	88	82	55	88	89	90	88	82	85	85.7
	Minimum	65	68	56	62	57	58	60	65	62	63	70	64	63	74	59	61	65	64	60	70	70	67	63	60	56	60	68	67	67	58	53	63.1
Paterson	Maximum	93	89	79	79	80	78	87	85	88	91	88	86	92	91	86	86	90	89	89	90	93	85	90	84	87	90	90	92	90	84	85	87.3
	Minimum	65	67	57	63	57	60	60	67	62	66	71	64	62	75	59	60	65	68	61	70	70	69	65	61	55	61	69	67	68	62	55	63.9
Plainfield	Maximum	92	80	79	81	82	73	87	84	87	92	88	84	94	92	88	82	90	84	90	91	92	79	92	81	89	90	91	93	87	80	86	86.5
	Minimum	64	60	55	60	56	56	62	64	59	59	68	64	59	76	55	56	62	60	55	67	69	66	61	59	52	59	66	67	64	55	50	60.8
Ridgefield	Maximum	91	77	78	79	81	72	83	84	86	91	86	85	91	92	87	83	88	84	90	93	91	81	92	83	87	87	90	90	87	80	84	85.6
	Minimum	63	62	56	60	55	58	60	66	62	64	71	62	60	66	57	60	65	64	60	67	68	67	64	59	54	62	69	67	66	58	53	62.1
Somerville	Maximum	97	84	84	82	83	72	87	90	91	96	92	86	96	95	89	87	93	86	93	91	92	83	94	82	88	89	93	91	86	82	88	88.5
	Minimum	60	66	54	62	55	55	60	65	60	59	71	62	61	69	55	59	63	63	56	70	70	64	65	56	52	55	68	65	65	54	50	60.9
New York, N. Y	Maximum	88	75	76	78	78	72	79	81	85	87	84	81	86	88	84	79	82	81	87	87	87	78	86	77	83	82	86	86	84	75	80	82.0
	Minimum	68	63	58	62	58	63	62	65	63	69	69	65	67	76	66	66	68	67	65	71	71	68	68	62	61	67	69	68	68	64	62	65.8
The Southern Interior.																																	
Belleplain	Maximum	92	....	80	....	79	69	80	83	86	89	90	85	88	87	88	83	85	86	87	80	82	87	88	80	83	85	91	88	86	79	83	84.4[b]
	Minimum	67	....	54	....	61	61	57	63	60	61	70	56	63	66	59	66	68	63	54	67	70	70	65	59	50	54	69	69	64	54	50	61.7[b]
Bridgeton	Maximum	94	88	81	76	82	80	83	84	89	91	91	87	92	92	89	85	89	89	91	87	90	89	89	81	86	86	92	90	87	81	85	87.0
	Minimum	70	69	57	65	60	61	61	65	62	64	72	63	68	68	64	67	66	66	60	68	70	70	65	62	57	61	69	69	68	59	57	64.6
Burlington	Maximum	93	90	82	79	83	80	84	87	85	83	90	88	92	95	93	88	88	86	92	94	88	88	91	87	90	88	92	91	89	84	87	88.0
	Minimum	65	68	64	65	63	64	62	64	66	66	72	67	72	72	68	66	68	70	70	58	70	66	66	65	66	61	66	70	67	63	68	66.4
Camden	Maximum	98	80	82	80	84	68	88	88	90	94	92	88	96	92	90	89	92	89	94	87	87	88	94	82	89	90	95	92	87	79	86	88.1
	Minimum	69	64	62	62	60	64	64	68	65	65	72	68	70	69	65	65	70	68	60	71	70	66	63	64	57	63	69	72	68	61	58	65.5
Clayton	Maximum	93	87	82	83	83	79	84	84	86	91	....	92	93	90	88	87	90	92	92	91	89	89	90	89	84	86	92	90	90	84	83	87.7[a]
	Minimum	72	67	55	77	59	62	66	62	63	61	....	65	62	69	60	70	68	62	56	72	70	68	64	59	54	56	57	70	66	58	55	63.5[a]
Freehold	Maximum	93	91	80	78	82	73	86	85	87	92	89	86	94	89	89	83	91	84	89	88	86	81	89	78	86	89	93	90	89	82	84	86.3
	Minimum	66	69	58	61	58	52	63	64	63	62	69	63	61	74	56	59	65	65	60	71	69	63	62	58	54	59	66	68	65	55	55	62.4
Hammonton	Maximum	93	78	83	78	83	69	86	87	89	92	93	90	94	90	92	88	92	91	95	90	87	86	91	82	86	85	90	90	87	81	85	87.2
	Minimum	67	58	52	60	58	60	55	62	58	62	63	57	63	60	51	62	65	57	55	66	67	65	62	56	53	58	65	68	64	54	51	59.8
Indian Mills	Maximum	93	82	81	77	81	71	87	85	87	92	90	85	95	88	88	86	92	85	93	85	86	84	92	79	88	88	92	90	86	78	85	86.2
	Minimum	67	69	51	58	59	59	55	63	59	60	67	57	61	68	58	63	62	60	55	67	69	65	65	59	51	56	65	70	65	56	57	60.8
Lakewood	Maximum	91	85	81	79	83	82	85	86	89	93	92	86	95	94	89	86	91	84	90	88	87	81	90	80	83	88	93	90	89	82	85	86.4
	Minimum	65	67	58	60	58	57	56	64	60	63	70	60	58	72	57	57	66	62	59	69	69	69	64	60	52	60	66	70	65	57	51	62.0
Moorestown	Maximum	93	74	81	78	82	69	85	85	88	92	90	85	93	91	87	86	91	87	92	84	85	85	90	79	85	86	90	89	85	78	84	85.5
	Minimum	68	62	59	60	58	60	60	65	62	62	68	64	67	67	61	64	68	66	58	69	69	66	64	59	54	60	67	70	63	59	55	63.0
Pemberton	Maximum	93	89	81	77	82	80	88	83	88	91	89	87	93	96	88	87	91	89	89	89	86	85	90	80	85	87	91	90	89	79	85	87.0
	Minimum	68	71	60	61	59	60	59	64	63	60	70	62	63	71	62	63	69	70	60	71	69	67	65	61	55	57	67	70	66	59	55	63.8
Pleasantville§§	Maximum	90	80	82	81	77	69	75	84	89	90	92	86	86	87	85	80	83	87	88	83	81	80	86	80	81	83	83	85	86	80	84	83.3
	Minimum	70	69	54	65	62	60	59	65	60	66	68	58	57	66	60	66	68	64	59	68	70	71	66	59	53	59	71	68	67	56	52	63.1
Runyon	Maximum	93	85	85	83	85	91	87	85	89	91	90	87	94	91	88	83	89	86	91	90	89	83	89	83	88	87	90	91	87	82	85	87.6
	Minimum	60	66	65	57	54	54	57	56	55	52	69	55	54	67	47	49	58	62	51	68	69	67	60	53	45	47	61	66	62	51	46	57.5
Trenton	Maximum	93	75	78	78	81	69	86	82	86	90	87	84	92	90	87	84	89	84	91	83	87	82	90	77	86	86	91	88	84	77	83	84.5
	Minimum	68	62	58	64	59	64	64	66	64	66	71	64	70	73	63	62	68	68	63	72	64	63	65	62	60	64	67	69	65	61	59	64.8
Tuckerton	Maximum	95	85	80	78	78	71	78	83	85	89	93	85	85	91	90	85	92	80	88	90	85	85	80	80	80	82	88	87	88	85	89	84.8
	Minimum	70	70	55	64	59	59	58	60	60	65	65	60	58	75	70	64	68	61	65	62	68	60	69	58	50	55	70	70	71	70	50	63.2
Philadelphia, Pa	Maximum	93	80	81	78	82	73	85	85	89	89	89	84	92	90	87	86	88	87	91	83	86	86	89	78	86	86	90	89	86	79	85	85.5
	Minimum	75	65	63	68	62	65	66	68	68	70	74	69	74	76	71	70	70	72	71	73	72	69	68	65	67	67	71	73	71	64	66	69.1
The Sea Coast.																																	
Asbury Park	Maximum	85	77	80	79	82	70	73	85	88	89	89	85	77	83	77	75	76	83	90	88	80	76	80	80	77	82	82	79	87	79	83	81.2
	Minimum	70	69	60	66	60	63	62	63	64	67	67	65	66	71	64	65	68	71	64	72	71	72	66	62	60	64	68	66	66	62	60	65.6
Atlantic City	Maximum	82	80	80	79	74	68	73	84	89	87	90	86	80	83	77	76	77	84	82	84	80	79	81	81	79	80	78	78	87	80	78	80.5
	Minimum	72	65	61	64	64	62	62	64	66	68	67	65	68	69	66	69	67	69	67	70	69	72	68	65	63	69	69	68	70	64	65	66.7
Long Branch	Maximum	90	76	82	80	83	75	76	81	87	90	88	85	82	82	83	75	83	85	91	90	83	80	84	83	80	82	86	84	86	82	83	83.1
	Minimum	66	64	59	66	62	62	61	67	61	70	70	65	63	68	63	60	66	68	62	71	73	67	66	61	53	54	71	70	66	62	58	64.4
Sandy Hook	Maximum	86	76	78	77	79	69	75	81	83	88	85	82	81	84	85	75	79	81	88	87	84	77	88	80	84	84	87	84	86	79	81	81.7
	Minimum	68	64	62	66	62	64	64	67	66	69	69	67	66	72	65	65	68	68	67	72	72	69	68	65	64	68	71	71	71	66	64	67.1

ª, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.320	.336	.301	.100	.304	.036	.192	.288	.288	.416	.320	.320	.320	.320	.288	.304	.300	.288	.060	.322	.080	.278	.240	.272	.288	.304	.198	.208	.320	.160	.336	8.110
	Wind movement	33	80	108	62	73	47	37	49	62	102	42	62	54	45	57	31	70	47	48	46	60	27	55	53	33	35	75	56	48	39	45	1681
Runyon	Evaporation	.220	260	.260	.100	.220	.070	.240	.240	.250	.260	.280	.290	.235	.265	.240	.240	.180	.380	.240	.240	.170	.120	.150	.240	.240	.240	.180	.150	.220	.210	.230	6.860
	Wind movement	25	43	43	24	11	19	9	35	37	19	40	20	12	12	7	23	10	7	11	14	7	11	5	1	5	6	10	11	10	12	7	501

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. AUGUST, 1932. No. 8.

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GENERAL SUMMARY.

The mean temperature for the month was rather uniformly from one to two degrees above the normal at nearly all stations in the State. It was the fourth successive month with above-normal averages. No marked warm or cool periods occurred, especially were there no cool ones as on four to five days only was the temperature average for the day below the normal for that date. The highest points recorded were in the low nineties and were registered during the last few days of the month, while the lowest were in the high forties and low fifties and were recorded mostly on the 13th, 21st and 22d.

Rainfall was below the normal at all stations except two,—Trenton and Sussex. At these two stations heavy local storms ran the monthly totals up above the normals. The average for the State was about 57% of normal, ranging from 79% in the Highlands and Kittatinny Valley, to 55% in the Southern Interior. In most cases one-third of the monthly total was received during a single day; in some cases, particularly in the southern section, more than half the monthly amount fell within a period of 24 hours. Dates on which rain was general were as follows: 3d, 7th, 10th, 11th, 18th and 19th. Scattered showers occurred on several other dates. However, a general view of the rainfall situation shows that the rather dry period which has prevailed since the close of March, has continued almost uninterruptedly through to the end of August. Crops in general have suffered considerably from lack of moisture, and all water supplies in wells and streams and in the soil, are quite low.

There were no damaging wind or hail storms.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 73.5°, which was 1.7° above normal. The highest temperature was 99° at Elizabeth on the 2d, and the lowest, 44°, at Layton on the 21st. The greatest daily range of temperature was 46° at Runyon on the 23d and 24th. The highest monthly mean temperature was 77.0° at Burlington, and the lowest, 70.6° at Charlotteburg and Long Valley.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +2.6°; Red Sandstone Plain, +2.1°; Southern Interior, +2.2°; Sea Coast, +2.5°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 2.75 inches, which was 2.02 inches below normal. The greatest monthly precipitation was 7.49 inches at Sussex, and the least, 1.00 inch at Sandy Hook. The greatest amount of precipitation in any 24 consecutive hours was 2.93 inches at Trenton on the 18-19th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 7, or 3 less than normal.

The precipitation accumulated departure from the normal for the year 1932, to date, by sections, is: The Highlands, —4.59 inches; Red Sandstone Plain, —7.06 inches; Southern Interior, —1.23 inches; Sea Coast, —5.48 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 42 miles per hour from the south at Sandy Hook on the 18th.

MISCELLANEOUS.

The per cent of possible sunshine was 72, or 6 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.99 inches, or 0.01 inch below normal. The highest reading was 30.33 inches at Trenton on the 24th, and the lowest 29.72 inches at Sandy Hook on the 11th.

The mean stage of the Delaware River at Phillipsburg was 0.5 foot, and the highest 1.3 feet on the 13th. The mean stage at Trenton was 0.2 foot, and the highest 0.5 foot on the 12th, 13th and 14th.

Thunderstorms occurred on the following dates: 1, 3, 4, 6, 7, 10, 11, 16, 19, 27, 28, 29 and 31. Dense fog was noted in the southwestern part of the State on the 6th, and along the seacoast on the 6th and 7th. Light hail fell at scattered places in the State on the 6th, 10th, 18th, 28th and 31st.

COMPARATIVE DATA FOR AUGUST

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	71.7	95	40	6.11	10.09	3.47	......	......	......	......
1886	69.5	96	42	2.81	5.36	1.10	......	......	......	......
1887	70.4	94	42	3.76	7.34	2.09	......	......	......	8
1888	72.5	98	41	6.13	10.53	2.55	......	......	8	9
1889	69.6	91	45	5.13	9.06	1.93	......	......	8	10
1890	71.5	99	40	4.90	7.51	2.89	8	15	8	11
1891	72.8	100	46	5.32	8.89	2.58	8	11	12	13
1892	73.4	99	46	3.63	5.65	0.72	12	13	6	9
1893	72.8	98	38	6.52	11.94	3.55	14	11	6	8
1894	70.9	97	44	2.58	9.28	0.15	13	12	6	7
1895	74.2	102	**34**	2.53	5.06	**0.02**	16	12	3	7
1896	73.6	105	39	1.83	3.27	0.50	17	10	4	7
1897	71.0	91	41	4.39	8.69	2.07	14	12	5	9
1898	74.8	98	42	5.36	9.28	2.70	12	12	7	10
1899	72.3	99	39	4.36	9.70	2.16	10	12	9	9
1900	**76.3**	104	41	2.68	4.56	0.70	15	11	5	10
1901	73.8	98	44	**9.43**	15.80	4.88	12	10	9	11
1902	70.1	93	40	3.91	10.67	1.31	15	13	3	9
1903	68.4	98	39	6.95	14.54	4.30	10	10	11	13
1904	70.8	92	37	6.62	13.01	2.65	15	10	6	9
1905	71.1	95	38	5.72	9.88	3.51	13	10	8	12
1906	74.6	97	42	5.95	**17.91**	2.21	10	11	10	13
1907	70.5	96	39	3.45	7.61	1.79	14	12	5	10
1908	70.6	103	36	5.05	9.23	2.43	11	10	10	10
1909	70.2	100	**34**	4.59	12.94	1.41	14	9	8	6
1910	70.4	92	36	3.78	8.46	1.76	9	10	12	10
1911	72.1	101	39	8.91	14.74	**5.31**	10	11	10	11
1912	70.0	95	35	3.42	7.62	1.19	12	13	6	10
1913	71.7	100	38	4.06	10.21	1.93	18	9	4	16
1914	73.3	98	46	3.15	6.53	1.04	13	12	6	9
1915	70.9	98	41	7.73	10.92	4.02	11	11	9	13
1916	73.2	100	40	**1.34**	4.15	0.27	20	7	4	6
1917	74.0	103	42	2.21	5.68	0.86	18	9	4	8
1918	74.4	**108**	40	1.85	4.25	0.34	18	7	6	7
1919	69.9	98	38	6.89	12.88	3.09	13	10	8	13
1920	72.3	94	42	6.10	10.60	2.94	8	11	12	17
1921	69.8	97	38	4.32	8.01	2.05	18	7	6	9
1922	71.2	96	39	1.63	6.78	2.18	13	9	9	12
1923	70.8	98	35	2.44	4.81	1.23	17	8	6	8
1924	71.9	102	38	4.40	9.48	1.82	18	8	5	8
1925	71.0	93	35	2.10	4.12	0.94	20	6	5	7
1926	72.8	101	38	6.58	8.84	3.74	11	9	11	14
1927	**67.1**	89	37	8.55	12.87	2.88	11	9	11	12
1928	71.5	99	45	6.72	14.26	3.33	12	8	11	13
1929	69.8	97	39	2.58	4.86	0.88	16	8	9	9
1930	71.1	101	**34**	3.32	5.58	1.92	16	9	6	6
1931	73.5	101	45	5.10	9.61	2.26	12	8	11	12
1932	73.5	99	44	2.75	7.49	1.00	20	7	4	7
Normal	71.8	....	....	4.77	....	....	13	11	7	10
Extremes	....	108	34	....	17.91	0.02	......	......	......	......

Climatological Data for August, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	^{a}74.0	+3.0	95	5†	51	21	37	3.05	−1.56	1.19	0	5	25	2	4	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	70.6	+2.7	94	31	45	1	43	2.17	−2.45	0.85	0	8	26	2	3	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	52	21	....	3.63	−0.79	1.04	0	7	24	4	3	s.	Brice E. Riker.
Dover	Morris	600	48	71.8	+2.7	92	31	50	21	38	2.50	−2.26	0.99	0	8	4	22	5	......	William C. Harris
Layton	Sussex	480	31	70.8	+2.4	95	31	44	21	38	3.45	−0.45	1.18	0	8	16	4	11	w.	A. M. Depue.
Long Valley	Morris	520	1	70.6	......	91	6†	48	1†	39	1.72	......	0.67	0	7	29	0	2	w.	S. N .Dilts.
Newton	Sussex	769	48	72.9	+2.5	96	31	51	21	41	1.94	−2.48	0.65	0	9	19	6	6	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	72.8	+1.0	94	31	52	22	37	4.31	−0.31	1.21	0	7	21	6	4	......	Town Engineer.
Sussex	Sussex	442	37	72.8^{a}	+3.3	98	6	49	25	44	7.49	+3.23	2.36	0	7	21	2	8	......	A. J. W. Mowatt
Means and extremes	......	......	....	72.0	+2.5	98	6	44	21	44	3.36	+0.88	2.36	0	7	21	5	5	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	72.0	+0.7	93	31	49	1	39	1.89	−3.19	0.64	......	8	17	1	13	nw.	John Kline.
Canoe Brook	Essex	173	2	70.8	......	91	27	48	12	40	1.75	......	1.05	......	5	19	9	3	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	....	......	......	....	1.66	−2.75	0.93	......	5	26	2	3	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	75.3	+1.9	99	2	53	3	38	3.01	−1.28	1.26	0	6	25	4	2	sw.	Union County Park Comm.
Flemington	Hunterdon	140	§46	75.0	+2.5	94	5†	55	1†	36	2.76	−1.95	1.02	0	6	24	5	2	s.	Hiram E. Deats.
Jersey City	Hudson	10	34	76.4	+2.3	92	25	62	13	28	2.84	−1.69	1.10	0	8	14	12	5	s.	S. K. Pearson.
Lambertville	Hunterdon	430	45	73.8	+1.4	94	31	55	20	32	3.86	−0.80	1.54	0	8	26	2	3	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	73.4	+0.2	94	5†	53	1†	38	1.98	−2.42	0.74	0	7	23	6	2	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	74.3	+2.2	92	27	53	1	34	3.46	−1.69	1.83	0	8	22	7	2	se.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	...	2.23	......	0.73	0	6	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	74.2	+2.0	90	5†	57	20	30	2.29	−2.44	1.11	0	7	11	14	6	s.	Philip Del Vecchio.
Plainfield	Union	120	44	73.7	+1.9	93	25†	54	22†	39	2.75	−2.46	0.86	0	8	15	13	3.	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	73.8	......	91	25	56	1†	34	2.96	......	0.71	0	9	13	15	3	s.	George P. Kirsten.
Somerville, near	Somerset	70	49	73.8^{b}	+1.4	95	31	53	20†	37	3.84	−1.00	1.29	0	7	19	7	5	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	2.31	......	0.59	0	7	....	....	....	.....	Hackensack Water Co.
New York, N. Y.	......	365	62	74.9	+1.8	87	8	62	13	22	2.72	−1.61	1.04	0	6	12	14	5	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.9	+1.6	99	2	48	12	40	2.64	1.97	1.83	0	7	20	7	4	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	72.8	+0.2	93	31	48	22	41	2.23	−2.07	1.09	......	5	12	7	12	sw.	A. F. Waldron.
Bridgeton	Cumberland	30	49	74.9	−0.1	93	31	55	22	34	2.34	−2.25	0.80	0	8	24	4	3	se.	Bennett K. Matlack
Burlington	Burlington	12	§46	77.0	+2.8	96	6	62	17	25	5.31	−0.14	1.80	0	8	18	12	1	nw.	Public Service Power Co.
Camden	Camden	20	....	76.0	......	96	31	56	22	32	2.39	......	1.14	0	7	15	12	4	se.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	73.7	......	93	27	53	28	35	1.40	−3.31	0.38	0	7	27	1	3	sw.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	73.1^{a}	......	97	31	51	13†	40	1.98	−2.00	0.58	0	6	20	9	2	sw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	38	74.0	−1.7	93	27	53	13†	35	2.27	−2.31	0.70	0	7	18	10	3	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	43	73.2	+0.6	95	31	51	22	38	2.87	−3.06	0.72	0	7	14	16	1	nw.	James M. Armstrong.
Lakewood	Ocean	54	28	72.3	+1.2	90	27	52	22	33	2.01	−4.04	0.50	0	7	24	3	4	nw.	R. W. Holman.
Moorestown	Burlington	......	69	73.8	+1.2	93	31	54	22	33	2.47	−2.42	1.28	0	6	24	3	4	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	2.73	−1.62	1.90	0	6	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	74.4	......	94	31	53	22	34	3.39	......	1.35	0	7	25	3	3	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	72.8	......	98	31	51	26	31	2.09	−2.84	1.29	......	5	25	4	2	se.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	4.06	......	2.60	0	6	16	14	1	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	73.0	......	97	23	45	21	46	1.67	......	0.43	0	6	24	6	1	s	N. J. Water Policy Comm.
Trenton	Mercer	190	60	75.4	+2.4	94	31	60	13	26	5.55	+0.80	2.93	0	10	14	12	5	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	3.58	......	2.29	0	7	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	72.0	−0.7	93	31	50	13†	35	1.47	−4.07	0.38	0	7	12	12	7	sw.	John H. Brown.
Philadelphia, Pa	......	117	61	77.7	+2.9	95	31	65	13	23	3.07	−1.55	1.35	0	10	14	12	5	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.9	+1.0	98	31	45	21	46	2.77	−2.26	2.93	0	7	19	8	4	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	72.8	+1.0	90	8	60	22	23	1.96	−3.10	0.50	0	12	27	3	1	sw.	Information Bureau.
Atlantic City	Atlantic	16	59	74.5	+2.0	87	29	61	22	23	2.68	−1.81	1.73	0	6	12	9	10	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	73.2	+2.2	92	8	54	22	30	1.17	−4.96	0.36	0	9	16	12	3	s.	William D. Martin.
Sandy Hook	Monmouth	22	34	75.2	+2.4	89	8	64	24	22	1.00	−3.98	0.37	0	8	17	11	3	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.9	+1.9	92	8	54	22	30	1.70	−3.46	1.73	0	9	18	9	4	sw.	
For the State	......	......	....	73.5	+1.7	99	2	44	21	46	2.75	−2.02	2.93	0	7	20	7	4	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for August, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.04				1.19			.98								.64									.20					3.05
Charlotteburg	Passaic			.30	.01			.70	.15			.20							.36	.28									.17				2.17
Culvers Lake	Delaware			.35			T.	.20	.05		T.	.89							.90	1.04									T.			.20	3.63
Dover	Passaic			.21			.21	*	.19		.34								.53									.03				.99	2.50
Layton	Delaware		.23	.24	T.		.42	.08	.04			.56							.70	1.18								T.					3.45
Long Valley	Morris		T.	.25				.08	.08										.67	.14									.23			.27	1.72
Newton	Delaware		T.	.21	.04			.06	.13			.50							.05	.29								.01				.65	1.94
Phillipsburg	...do		T.	.06				.19	.63		1.21								.81	T.								.92			T.	.49	4.31
Sussex	Hudson			.04			.81	2.02				1.30							.31	2.36												.65	7.49
The Red Sandstone Plain.																																	
Boonton‖	Passaic	.01		.11	.35			.05	.17			.32								.64									.24				1.89
Canoe Brook‖	Essex			.23	.28				T.			.13								1.05									.06				1.75
Chatham‖	...do			.21	.25				T.			.21								.93									.06				1.66
Elizabeth	Coast		T.	.50				T.	T.			.31							.46	.03								.45	1.26			T.	3.01
Flemington	Raritan		T.	.18				T.				.24							1.02	.13								.26				.93	2.76
Jersey City	Coast	T.		.36	.10		.70	T			.30	.08	T.						.12	.08								1.10				T.	2.84
Lambertville	Delaware		.01	.43				T.	.12			.27							.70	.56								.23				1.54	3.86
Little Falls.‖	Passaic	.03		.10	.30				.03			.73								.74									.05				1.98
New Brunswick	Raritan			.43	.02			.05				.74							.18	.16									1.83			.05	3.46
New Milford‖	Hackensack			.08	.25			.73				.47								.68									.02				2.23
Paterson	Passaic			.21	.01			1.11	.04		.48	.19	T.						.25										T.			T.	2.29
Plainfield	Raritan			.68					.07		.40	.08							.77	.09								.40				.26	2.75
Ridgefield**	Hackensack		T.	.34			.70	.01			.54	.20	.07						.38	.10								.62					2.96
Somerville	Raritan			.61				.71				.25							1.27	.02								.30				.68	3.84
Woodcliff Lake‖	Hackensack			.56	.30			.28	.03			.47								.59									.08				2.31
New York, N. Y***	Coast		T.	.45			.60	T			.34	.07	T.						.22									1.04				T.	2.72
The Southern Interior.																																	
Belleplain	Tuckahoe			.41			T.	1.09												.31											.02	.40	2.23
Bridgeton	Coast			.54	.06			.80		T.		.13						.11	.46	.46											.08		2.34
Burlington	Delaware			1.80	.40			.60	.42			.84							.10	.75									.40				5.31
amden***	..do		T.	.47			T.	.07			1.13	.01						T.	.16	T.	T							.37				.18	2.39
layton	...do																																......
reehold	Raritan	.20		.38	T.			.15				.21							.08	.06									.32				1.40
Hammonton	Mullica			.58	.19			.14				.34							.43										.30				1.98
Hightstown	Raritan		.34	.70				.20				.21							.17	.40									.25				2.27
ndian Mills	Mullica			.51	.23			.25				.60							.44										.12			.72	2.87
akewood	Metedeconk	T.	T.	.50	.40			.10				.50							.30	.08									.13			T.	2.01
Moorestown‖	Delaware			.16	.46				.15			1.28								.18									.24				2.47
orthfield	Coast			.22	.06			1.90				.12							.15	.28													2.73
emberton	Delaware	T.		.79	1.35			.21				.71							.11	.08									.14				3.39
leasantville‖	Coast			.12	.08				1.29			.20								.40													2.09
ort Norris	Maurice			.48	.22			2.60											.48	.08											.20	T.	4.06
unyon	Coast			.42				.08				.23							.13	.43									.38				1.67
renton***	Delaware	.01	T.	.73			.03	.05			.14	.08							2.92	.01								.09				1.49	5.55
renton No. 2‖	...do		.03	.39	.46			T.	.04			.18								2.29									.19				3.58
uckerton	Coast			.19	.11	.02		.34				.32							.11	.38													1.47
hila., Pa***	Delaware		.03	.48			T.	.03		T.	1.28	.07						.11	.62	.02								.41				.02	3.07
The Sea Coast.																																	
sbury Park	Coast	.02		.44	.08	.02		.16			.01	.37							.24	.06								.24	.26			.06	1.96
tlantic City***	...do		T.	.12				1.73			T.	.02							.33	.41												.07	2.68
ong Branch**	...do.	.03	T.	.36				.10			.10	.08							.22	.07								.17				.04	1.17
andy Hook***	...do	T.	T.	.27			.01	.03			.19	.06	T.						.05									.37				0.02	1.00

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip-
ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.00	30.31	24	29.75	11	12.5	31	s.	18	77	67	75	64
amden						6.9	40	n.	31				
ong Branch	30.31	30.32	24	29.76	11					81	62	73	
ew York, N. Y	29.99	30.31	24	29.75	11	12.1	44	w.	10	73	54	64	76
hiladelphia, Pa	30.00	30.33	24	29.75	11	10.8	31	ne.	31	70	48	58	74
dgefield,	29.99	30.31	24	29.76	11								
ndy Hook	29.98	30.31	24	29.72	11	11.5	42	s.	18	76	58	75	74
renton	29.99	30.33	24	29.73	11	8.9	38	ne.	31	71	47	63	79

Daily Temperatures for August, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	90	89	79	91	95	95	87	90	90	90	85	83	....	88	91	92	87	80	84	86	83	89	89	87	91	93	91	89	88	89	95	88.5[a]
	Minimum	55	64	67	68	56	61	69	66	60	57	64	55	54	53	54	60	63	68	60	55	51	53	57	58	59	58	60	62	57	60	65	59.6
Charlotteburg	Maximum	88	88	84	89	91	92	87	86	86	87	86	82	82	85	87	90	87	81	80	82	82	86	86	86	91	90	90	88	83	86	94	86.5
	Minimum	45	57	62	52	49	56	65	65	54	48	64	49	54	52	48	53	61	65	61	47	46	47	54	50	53	54	58	58	52	56	60	54.7
Dover	Maximum	89	84	73	87	91	89	78	88	87	87	83	81	82	87	87	88	84	75	79	81	81	86	83	83	89	88	88	78	84	87	92	84.5
	Minimum	51	64	69	66	54	57	67	67	58	53	62	53	57	57	53	57	62	66	62	53	50	62	58	55	58	59	....	62	58	59	63	59.1[a]
Layton	Maximum	84	85	76	85	92	91	84	85	84	87	81	80	81	85	90	88	87	75	80	80	81	84	86	85	89	89	87	81	83	85	95	84.7
	Minimum	57	55	65	61	61	56	67	63	55	55	60	51	51	60	55	56	65	67	58	52	44	51	54	54	57	54	55	58	57	51	64	56.9
Long Valley	Maximum	86	86	76	81	90	91	86	86	85	88	81	80	81	85	89	87	86	76	78	81	81	85	82	84	88	87	87	87	82	86	91	84.5
	Minimum	48	60	64	66	51	55	66	64	57	51	63	55	56	60	50	56	57	65	62	50	50	48	54	53	53	53	56	60	51	61	61	56.6
Newton	Maximum	93	90	76	89	95	93	85	90	90	89	85	81	82	87	89	91	88	83	80	83	81	86	86	84	91	90	90	83	86	88	96	87.1
	Minimum	52	60	62	65	55	60	65	64	58	65	61	52	57	55	55	59	63	63	58	59	51	55	57	57	58	59	60	59	56	56	63	58.7
Phillipsburg	Maximum	89	87	79	90	93	93	89	89	88	89	85	84	85	66	91	91	88	75	72	85	82	80	87	86	69	89	90	86	83	84	94	85.1
	Minimum	53	65	67	70	56	61	71	66	57	62	64	56	58	55	55	61	65	68	63	57	53	52	57	57	59	65	60	62	57	61	66	60.6
Sussex	Maximum	90	91	81	87	97	98	84	88	87	88	81	81	82	....	96	96	89	77	75	81	85	87	90	88	93	90	89	84	82	87	94	87.3[a]
	Minimum	51	60	65	68	55	60	67	67	58	55	64	53	55	....	54	55	65	67	61	53	50	53	53	57	49	59	60	60	58	55	64	58.4[a]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	88	91	76	87	91	89	82	89	88	88	84	88	85	87	90	88	86	83	83	84	84	88	81	84	89	90	91	86	86	88	93	86.7
	Minimum	49	59	64	65	53	56	62	68	58	51	60	51	56	60	51	56	57	61	64	51	56	50	56	54	54	56	55	63	57	58	62	57.2
Canoe Brook§§	Maximum	85	88	77	86	89	89	81	89	88	89	83	82	89	86	87	89	84	80	82	83	82	87	85	84	90	88	91	85	85	89	90	85.9
	Minimum	49	59	63	66	52	56	65	68	58	49	63	48	51	49	49	55	56	66	63	49	49	50	52	53	53	54	55	57	51	55	61	55.6
Elizabeth	Maximum	85	99	82	90	98	90	84	94	93	92	88	85	85	90	95	87	84	83	85	87	86	91	87	84	94	90	94	87	87	90	89	88.9
	Minimum	57	65	53	72	60	62	70	69	65	58	67	57	57	62	58	62	62	68	65	56	56	56	61	60	58	60	61	65	59	63	69	61.7
Flemington	Maximum	91	86	78	91	94	93	92	94	92	92	86	87	84	89	91	92	89	80	86	88	85	92	91	87	92	92	92	89	85	90	94	89.2
	Minimum	55	65	66	72	58	60	71	66	63	56	66	55	56	58	56	59	59	68	65	55	56	56	59	58	57	57	60	63	60	63	66	60.8
Jersey City	Maximum	85	87	74	89	90	91	83	90	89	88	85	83	82	88	87	86	84	80	84	85	83	89	85	84	92	88	90	85	85	90	88	86.1
	Minimum	65	71	65	71	70	70	71	71	70	65	68	64	62	64	67	68	69	67	67	64	63	63	67	65	64	65	66	68	65	66	70	66.8
Lambertville	Maximum	87	84	75	88	90	90	86	87	87	91	83	85	79	90	90	90	87	77	81	83	83	88	85	84	89	88	90	82	83	83	94	85.8
	Minimum	60	64	65	63	60	62	71	62	65	62	65	62	57	60	58	61	64	67	62	55	58	57	61	58	60	61	64	64	60	64	67	61.9
Little Falls§§	Maximum	89	88	77	90	94	91	82	91	90	89	86	85	87	90	91	89	85	83	85	87	84	90	89	86	94	90	91	88	88	91	92	88.1
	Minimum	53	60	65	66	56	59	62	68	61	55	61	54	59	55	55	58	60	65	65	54	53	54	57	57	56	60	58	61	58	57	57	58.7
New Brunswick	Maximum	86	87	81	88	89	89	86	90	90	90	84	83	82	87	86	87	87	81	82	85	83	89	84	84	91	89	92	88	84	88	91	86.5
	Minimum	53	65	65	72	60	62	71	68	66	58	67	61	58	60	57	61	61	68	67	56	59	55	62	59	57	60	62	66	60	64	65	62.1
Paterson	Maximum	86	86	82	87	90	89	84	87	87	86	82	82	87	85	86	85	84	82	81	83	86	81	84	85	90	86	88	84	85	88	89	85.4
	Minimum	62	64	67	67	60	63	68	70	65	59	66	60	59	62	59	61	65	68	66	57	59	58	63	63	61	63	61	64	63	63	68	63.0
Plainfield	Maximum	86	88	73	89	91	92	85	92	89	91	85	84	84	89	89	89	88	80	84	84	84	90	85	84	93	91	93	85	85	90	89	87.1
	Minimum	56	64	64	68	57	60	69	68	63	55	67	55	58	59	55	59	58	64	64	54	55	54	59	59	54	59	60	64	62	60	65	60.3
Ridgefield	Maximum	83	85	74	89	89	89	79	90	88	88	84	82	84	87	87	85	83	81	84	85	84	90	85	83	91	87	88	85	85	87	86	85.4
	Minimum	56	63	65	70	59	62	69	70	64	59	67	58	57	59	57	62	64	67	64	57	56	56	61	62	62	64	64	65	60	61	68	62.2
Somerville	Maximum	91	89	76	90	94	....	....	92	91	91	86	83	85	90	91	92	90	82	84	87	86	90	86	87	91	91	92	85	87	92	95	88.5[b]
	Minimum	54	65	65	66	58	....	....	61	63	54	62	56	55	57	56	58	59	68	59	53	53	56	58	56	55	56	58	65	58	61	65	59.0[b]
New York, N. Y.	Maximum	80	83	74	86	87	84	76	87	86	84	82	80	79	84	82	81	77	77	81	86	79	85	82	81	87	83	84	83	32	85	82	82.3
	Minimum	66	72	65	72	72	70	71	72	70	67	68	64	62	65	69	69	69	67	67	64	64	64	68	66	65	66	67	68	65	67	70	67.5
The Southern Interior.																																	
Belleplain	Maximum	88	85	79	86	88	88	84	87	88	89	82	84	81	85	89	86	85	81	81	83	87	89	87	85	88	87	88	88	87	90	93	86.1
	Minimum	57	67	65	69	58	62	70	68	65	58	70	56	51	54	52	56	57	69	66	49	60	48	63	51	50	49	52	68	60	62	70	59.6
Bridgeton	Maximum	90	83	78	86	90	90	84	89	90	91	89	85	85	88	91	86	84	78	84	86	86	89	90	86	88	85	89	83	78	89	93	86.5
	Minimum	62	67	64	71	63	66	71	71	68	63	68	61	57	58	59	62	62	69	64	58	59	55	59	58	57	60	66	69	62	64	70	63.3
Burlington	Maximum	86	83	78	88	90	96	70	92	90	90	88	85	83	87	89	90	87	83	83	85	82	89	89	86	90	89	86	83	83	87	95	86.5
	Minimum	68	65	66	74	70	72	66	68	68	59	67	70	67	66	64	71	62	69	66	66	65	64	70	69	66	66	70	71	67	70	73	67.6
Camden	Maximum	93	89	79	88	93	92	86	90	88	92	84	84	82	86	88	90	88	80	84	84	81	88	85	87	91	91	94	85	85	89	96	87.5
	Minimum	64	66	66	70	63	67	72	70	65	63	66	63	63	65	62	63	65	71	63	59	62	56	62	60	59	61	65	70	66	66	68	64.5
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	81	87	83	89	89	88	84	89	89	90	84	84	83	88	85	86	86	82	85	35	82	89	85	82	90	89	93	88	85	89	91	86.5
	Minimum	56	60	66	72	60	66	68	62	68	60	66	58	54	57	60	62	61	67	66	55	55	58	59	56	57	58	62	53	58	62	66	60.9
Hammonton	Maximum	90	86	76	88	91	91	88	90	....	90	84	86	85	88	90	89	82	80	85	86	85	90	86	86	91	89	92	88	89	91	97	87.7[a]
	Minimum	57	64	62	68	59	63	70	67	....	62	61	55	51	53	53	56	58	65	60	56	53	51	53	55	51	54	62	63	54	60	60	58.5[a]
Hightstown	Maximum	86	85	76	87	91	91	86	88	89	88	84	83	84	88	90	91	90	83	82	85	82	88	86	86	89	92	93	84	80	89	92	86.7
	Minimum	57	64	66	74	58	60	73	66	65	57	66	57	53	55	55	62	62	68	65	55	58	53	59	55	58	60	63	59	70	61	66	61.3
Indian Mills	Maximum	88	87	75	85	90	91	84	89	87	90	83	87	82	86	90	87	85	79	82	87	82	88	84	84	91	88	92	85	83	88	95	86.3
	Minimum	56	63	65	71	58	63	72	69	65	57	66	55	52	56	54	59	61	67	64	53	59	51	54	55	53	54	62	65	52	61	67	60.0
Lakewood	Maximum	82	89	86	86	86	87	81	88	89	88	83	83	84	85	83	83	83	82	82	81	79	84	79	79	87	83	90	83	83	85	89	84.3
	Minimum	56	61	67	71	59	61	71	68	64	55	67	56	57	57	54	59	58	67	66	54	56	52	57	53	54	56	62	66	56	62	67	60.3
Moorestown	Maximum	88	86	77	87	90	90	85	89	88	88	83	83	82	86	88	87	86	79	82	85	82	87	85	85	89	88	91	85	84	88	93	86.0
	Minimum	60	63	65	66	61	63	71	67	62	59	64	59	58	58	59	61	62	68	60	56	59	54	59	57	57	58	62	66	61	63	67	61.5
Pemberton	Maximum	88	86	75	86	90	91	85	88	88	89	86	83	83	89	89	88	86	80	84	85	84	87	88	83	89	90	90	87	82	87	94	86.5
	Minimum	59	64	65	72	61	64	72	69	67	58	67	64	57	58	58	61	63	69	66	56	59	53	57	58	55	56	63	66	60	64	67	62.2
Pleasantville§§	Maximum	82	83	77	87	88	83	81	89	91	85	82	83	84	85	81	82	81	79	86	81	79	83	79	78	83	79	84	87	87	86	98	83.6
	Minimum	57	67	66	67	61	65	71	71	65	57	69	56	56	55	57	59	64	71	67	59	60	52	56	60	54	51	68	67	58	63	69	61.9
Runyon	Maximum	85	88	81	91	91	92	86	92	94	91	90	88	88	91	88	87	87	84	86	85	88	93	97	95	91	90	91	96	89	92	91	89.6
	Minimum	49	56	66	71	51	56	71	66	59	49	65	51	46	47	47	53	52	67	66	65	45	65	51	49	49	52	54	54	55	59	58	56.3
Trenton	Maximum	88	84	76	87	90	91	83	87	87	89	83	81	82	86	87	87	85	79	80	85	82	87	83	84	88	87	90	82	80	87	94	85.2
	Minimum	64	67	66	72	66	65	71	69	71	65	69	64	60	62	62	66	66	69	66	61	61	61	66	62	62	63	66	68	63	67	69	65.5
Tuckerton	Maximum	84	88	81	90	90	85	89	90	88	88	84	82	82	84	85	84	85	88	85	84	83	82	80	82	80	82	83	90	85	88	93	85.3
	Minimum	59	65	60	65	71	65	70	65	65	60	60	51	50	58	57	58	52	60	60	61	59	58	52	50	50	58	58	57	50	60	60	58.8
Philadelphia, Pa	Maximum	88	83	78	87	90	91	86	90	88	90	84	82	83	87	88	88	86	78	81	83	82	88	87	84	88	88	90	83	83	87	95	86.0
	Minimum	68	71	67	74	73	71	73	74	73	71	71	70	65	68	69	69	69	71	68	66	65	65	69	67	66	66	69	73	67	70	73	69.4
The Sea Coast.																																	
Asbury Park	Maximum	78	83	75	87	80	79	76	90	86	81	85	83	83	81	79	79	78	74	77	76	76	80	81	76	82	76	77	84	85	80	82	80.3
	Minimum	63	70	65	65	67	68	69	70	71	65	68	64	60	63	63	63	69	65	63	62	67	60	64	65	62	63	67	66	62	68	71	65.4
Atlantic City	Maximum	80	78	74	87	82	80	77	87	84	82	84	82	85	86	80	80	80	77	80	80	76	80	78	76	78	79	80	86	87	82	85	81.0
	Minimum	67	70	66	69	70	69	71	70	71	70	70	66	62	63	69	71	71	70	68	67	66	61	65	68	64	67	72	71	66	66	73	68 0
Long Branch	Maximum	78	88	75	87	82	81	80	92	87	88	85	85	84	86	81	81	82	79	82	81	80	84	78	76	85	80	86	85	87	87	85	83.1
	Minimum	71	68	70	67	62	64	72	71	64	59	68	60	57	58	58	64	62	67	67	56	60	54	61	58	59	60	63	67	60	67	69	63.3
Sandy Hook	Maximum	79	85	75	86	83	82	77	89	88	84	82	82	81	84	82	79	77	77	82	80	79	86	77	76	86	79	84	83	84	85	80	81.7
	Minimum	68	72	69	73	69	69	72	72	72	69	70	67	64	68	68	70	69	69	69	68	67	64	68	67	65	67	68	70	68	70	71	68.8

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	.288	.184	.064	.240	.272	.240	.266	.144	.336	.280	.208	.224	.272	.288	.224	.320	.192	.048	.160	.160	.288	.272	.240	.256	.256	.240	.288	.240	.288	.272	.220	7.27
	Wind movement	38	51	52	75	31	42	41	29	29	20	54	40	30	45	47	33	52	88	72	14	41	38	31	49	37	33	54	66	41	49	40	136
Runyon	Evaporation	.210	210	.060	.210	.180	.240	.080	.240	.030	.210	.170	.230	.210	.210	.240	.240	*	.130	.220	.210	.240	.200	.210	.210	.240	.210	.210	.200	*	.240	.095	5.58
	Wind movement	9	30	20	20	10	15	8	16	13	27	20	23	18	14	19	29	22	64	28	11	18	10	16	18	26	26	14	36	33	10	9	63

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. **Observations taken in the morning, and entered on preceding day

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. SEPTEMBER, 1932. No. 9.

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GENERAL SUMMARY.

The month opened with quite warm weather, the maximum temperatures being fairly close to ninety degrees at most stations, except those near the sea coast, during the first six days. Another warm period occurred during the period from the 20th to 23d, inclusive, but this period was not so warm. During the remainder of the month the temperature was mostly a little below normal, except on the last day when it was decidedly below, with minimum temperatures sinking to the lowest of the season. These points were mostly in the thirties in the interior, except in the northern portion where a few stations had below-freezing temperatures. The monthly averages were a little above normal at nearly all stations.

The amount of rainfall, in percentage of the normal amount, showed a slight increase over that of the preceding month, but it still continued at less than two-thirds of the normal for the State as a whole. The Southern Interior received relatively the greatest amount. Moderate to heavy rains were general on the 1st, 2d, 4th, 5th and 6th in the northern half, and on the 1st and 2d in the Southern Interior with lighter rains following on the 5th and 6th. In the Highlands there were practically no other rains until the 27-28th, while over the remainder of the State good amounts were received on the 16th with lighter amounts on the 23d-24th and 27-28th.

A few killing frosts were reported from stations in the extreme northern part of the State. These occurred about a week in advance of the normal date. No damage was reported by wind or hail.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 66.4°, which was 1.0° above normal. The highest temperature was 100° at Sussex on the 1st, and the lowest, 27°, at Charlotteburg on the 26th. The greatest daily range of temperature was 54° at Layton on the 12th. The highest monthly mean temperature was 68.8° at Camden, and the lowest, 62.4° at Layton.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +2.5°; Red Sandstone Plain, +2.0°; Southern Interior, +2.0°; Sea Coast, +2.3°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 2.29 inches, which was 1.32 inches below normal. The greatest monthly precipitation was 4.60 inches at Trenton No. 2, and the least, 0.94 inch at Belvidere. The greatest amount of precipitation in any 24 consecutive hours was 2.70 inches at Charlotteburg on the 6th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 7, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1932, to date, by sections, is: The Highlands, —6.36 inches; Red Sandstone Plain, —8.69 inches; Southern Interior, —2.09 inches; Sea Coast, —6.56 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 12 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 44 miles per hour from the northeast at Sandy Hook on the 8th.

MISCELLANEOUS.

The per cent of possible sunshine was 66, or 2 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.07 inches, or normal. The highest reading was 30.53 inches at Ridgefield on the 26th, and the lowest 29.49 inches at Sandy Hook on the 16th.

The mean stage of the Delaware River at Phillipsburg was 0.1 foot, and the highest 1.0 foot on the 5th. The mean stage at Trenton was 0.1 foot below the zero of the gage, and the highest 0.4 foot on the 6th and 7th.

Thunderstorms occurred on the following dates: 1, 2, 3, 4, 5, 6, 21, 23, 24 and 28. Dense fog occurred in the southern part of the State on the 1, 2, 3, 11, 15, 20 and 21. Frost was noted throughout the northern portion of the State, it being mostly light to heavy except in the Highlands where killing frosts was experienced. Scattered stations in the southern half of the State reported light frost on the 26th or 30th.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	64.2	93	38	0.83	1.69	0.25	......	......	......	......
1886	66.9	95	36	1.13	1.76	0.86	......	......	......	......
1887	61.6	90	30	3.66	6.25	1.62	......	......	......	7
1888	63.1	84	29	7.09	10.65	3.75	......	......	14	12
1889	64.8	90	34	**8.36**	**13.13**	3.17	......	......	14	14
1890	64.4	91	33	4.75	8.61	2.59	10	10	10	10
1891	68.7	95	38	2.46	5.91	0.90	16	9	5	6
1892	64.2	90	33	1.81	3.78	1.02	15	11	4	6
1893	62.7	90	31	3.20	5.38	1.93	12	10	8	8
1894	68.8	97	31	7.46	11.65	3.69	10	10	10	8
1895	69.7	**109**	29	1.07	2.71	0.22	17	10	3	5
1896	65.1	95	30	4.37	8.74	2.26	19	7	4	5
1897	65.5	99	30	1.65	3.97	0.21	19	7	4	5
1898	68.6	100	31	2.00	3.87	0.65	17	8	5	6
1899	64.4	93	30	5.88	9.61	2.88	15	9	6	9
1900	69.9	98	32	2.86	7.37	1.09	14	10	6	6
1901	66.8	94	29	3.38	6.82	1.63	15	9	6	10
1902	64.6	93	30	5.65	8.95	3.11	11	7	12	13
1903	65.0	92	29	3.34	7.10	1.39	17	8	5	7
1904	64.8	93	**23**	4.79	10.08	0.89	14	10	6	7
1905	65.4	90	28	5.23	9.18	2.87	16	7	7	8
1906	68.9	94	33	2.19	4.66	0.75	15	9	6	7
1907	67.1	92	31	8.08	12.95	3.55	10	8	12	14
1908	65.7	90	29	2.09	4.13	0.95	11	10	9	8
1909	64.5	89	30	3.30	4.58	2.08	11	10	9	8
1910	67.3	97	32	2.39	3.97	1.01	12	10	8	6
1911	66.4	90	30	2.88	5.33	1.08	10	12	8	9
1912	65.9	87	28	4.47	6.76	2.68	12	7	11	10
1913	64.4	96	27	3.87	6.55	1.56	13	8	9	9
1914	64.0	99	24	**0.37**	1.64	**0.14**	21	6	3	3
1915	68.5	97	30	2.08	4.46	0.55	17	9	4	5
1916	65.2	98	31	2.84	5.29	1.29	20	7	3	6
1917	**61.5**	87	27	2.74	6.13	0.47	16	7	7	6
1918	62.2	90	29	3.84	6.00	2.66	14	8	8	9
1919	65.8	96	32	3.26	6.28	1.04	16	6	8	8
1920	66.8	90	30	3.87	8.53	1.67	17	8	5	7
1921	70.2	99	36	2.35	5.04	0.80	15	8	7	8
1922	66.7	95	27	2.26	5.22	0.59	19	5	6	4
1923	67.0	90	28	3.78	6.26	2.24	14	8	8	7
1924	62.2	99	29	5.42	8.44	2.47	13	8	9	10
1925	67.8	96	25	2.92	5.81	0.64	11	11	8	7
1926	64.5	93	32	4.18	7.09	1.53	14	6	10	10
1927	65.6	97	29	2.66	5.03	0.65	19	6	5	5
1928	62.6	90	29	4.52	9.62	1.54	12	8	10	10
1929	67.0	100	28	4.74	8.24	2.12	14	7	9	8
1930	69.4	95	32	2.14	4.96	0.44	16	9	5	8
1931	**70.5**	100	34	1.98	3.15	0.86	19	6	5	6
1932	66.4	100	27	2.29	4.60	0.94	16	8	6	7
Normal	65.4	....	....	3.61	....	....	15	8	7	8
Extremes	....	109	23	....	13.13	0.14	......	......	......	......

W. B. O. Philadelphia-10-26-32-830.

Climatological Data for September, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	67.3	+2.6	96	1	33	30	46	0.94	−2.83	0.50	0	4	20	4	6	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	63.8	+1.9	94	1†	27	26	50	4.46	+0.04	2.70	0	8	24	2	4	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	35	30	....	1.70	−2.84	0.65	0	4	23	5	2	nw.	Brice E. Riker.
Dover	Morris	600	48	63.2	+1.0	94	1	32	26	38	3.19	−0.90	1.37	0	7	9	13	8	......	William C. Harris
Layton	Sussex	480	31	62.4	+0.1	98	1	26	30	54	1.21	−2.71	0.65	0	4	13	4	13	ne.	A. M. Depue.
Long Valley	Morris	520	1	63.4	......	95	1	29	26	46	2.17	......	0.87	0	5	24	3	3	se.	S. N .Dilts.
Newton	Sussex	769	48	64.6	+1.1	95	1	33	30	37	3.66	−0.15	2.37	0	5	12	11	7	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	65.6	+0.4	95	1	34	26	43	1.11	−2.55	0.35	0	6	12	3	15	......	Town Engineer.
Sussex	Sussex	442	37	66.0	+1.8	100	1	32	26	50	1.67	−2.23	0.71	0	6	15	11	4	......	A. J. W. Mowatt
Means and extremes	......	......	....	64.5	+1.3	100	1	27	26	54	2.23	−1.77	2.70	0	5	17	6	7	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	65.0	+1.4	93	1†	32	26	45	3.01	−1.12	1.34	......	9	15	3	12	sw.	John Kline.
Canoe Brook	Essex	173	2	64.1	......	94	1†	28	26	46	2.74	......	1.11	......	9	20	6	4	w.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	3.37	−0.92	1.31	......	9	19	6	5	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	67.7ᵃ	+1.0	95	2	38	26†	41	2.05	−1.72	0.55	0	8	20	6	4	se.	Union County Park Comm.
Flemington	Hunterdon	140	§46	67.9	+1.6	98	1	35	26	45	1.01	−2.89	0.43	0	5	20	7	3	nw.	Hiram E. Deats.
Jersey City	Hudson	10	34	68.3	+1.1	93	2	41	30	25	1.54	−1.81	0.61	0	7	11	14	5	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	66.8	+1.0	94	1	36	30	35	1.20	−2.69	0.32	0	8	19	5	6	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	67.1	+3.0	97	2	35	26	47	2.22	−1.36	0.49	0	10	17	8	5	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	66.7	+1.1	93	1	38	30	37	3.46	−0.14	2.33	0	7	14	13	3	nw.	N. J. Experiment Station.
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	1.35	......	0.42	......	7	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	67.5	+1.3	94	2	38	30	35	1.33	−2.80	0.65	0	11	10	13	7	nw.	Philip Del Vecchio.
Plainfield	Union	120	44	66.1	+0.5	94	2	37	26	41	2.70	−1.67	1.33	0	7	10	16	4	sw.	S. K .Pearson.
Ridgefield	Bergen	80	15	66.6	......	96	2	36	30	42	1.95	......	0.71	0	7	11	13	6	s.	George P. Kirsten.
Somerville, near	Somerset	70	49	66.6ᵃ	+0.6	96	1	33	26	43	2.87	−0.78	1.86	0	7	14	8	8	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	1.54	......	0.40	......	9	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	62	67.7	+0.9	92	2	41	30	24	1.56	−1.83	0.62	0	8	11	15	4	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	66.7	+1.3	98	1	28	26	47	2.16	−1.63	2.33	0	8	16	9	5	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	66.0	−0.5	92	1†	32	26†	41	3.00	−0.39	1.70	......	5	12	6	12	se.	A. F. Waldron.
Bridgeton	Cumberland	30	49	68.0	−0.2	94	2	40	30	35	1.24	−2.07	0.67	0	5	23	3	4	sw.	Bennett K. Matlack
Burlington	Burlington	12	§46	68.7	+1.9	95	1	41	30	35	3.65	+0.14	1.90	0	6	17	10	3	ne.	Public Service Power Co.
Camden	Camden	20	....	68.8	......	93	1	41	26	37	1.41	......	0.33	0	6	12	13	5	s.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	66.7	......	93	1	35	30	35	2.27	−2.02	0.76	0	6	22	5	3	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	66.3	......	95	1	32	30	42	2.55	−0.64	1.12	0	9	19	5	6	sw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	38	67.3	+0.5	94	1	36	26	38	2.79	−0.20	1.13	0	7	18	10	2	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	43	66.4	+0.3	93	1	34	26†	44	2.72	−1.19	1.15	0	7	14	10	6	n.	James M. Armstrong.
Lakewood	Ocean	54	28	65.2	+0.6	90	2	34	26	34	2.18	−0.61	0.80	0	9	21	3	6	sw.	R. W. Holman.
Moorestown	Burlington	......	69	67.1	+1.1	92	1†	38	26†	36	2.53	−1.10	1.00	0	6	17	6	7	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	1.64	−0.86	0.67	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	67.3	......	92	1†	37	26	36	3.12	......	1.78	0	8	15	8	7	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	65.9	......	87	2†	37	26	39	2.51	−0.61	0.79	......	7	17	8	5	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	1.62	......	0.65	0	6	16	6	8	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	63.8	......	97	2	26	26	50	3.07	......	1.77	0	5	20	8	2	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	67.6	+0.7	93	1	41	30	30	2.70	−0.70	1.54	0	7	12	11	7	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	4.60	......	1.78	0	7	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	67.2	+1.0	92	2	36	30	34	2.18	−0.88	0.72	0	9	14	7	9	nw.	John H. Brown.
Philadelphia, Pa	......	117	61	70.8	+2.8	97	1	45	30	23	1.05	−2.09	0.36	0	6	11	11	8	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	67.0	+0.6	95	1	32	26†	44	2.51	−0.86	1.90	0	7	17	7	6	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	67.3	+0.5	85	2†	41	30	28	1.88	−1.11	1.05	0	9	26	2	2	ne.	Information Bureau.
Atlantic City	Atlantic	16	59	68.2	+1.4	87	6	46	30	22	1.75	−0.90	1.15	0	8	11	8	11	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	65.8	−0.1	92	2	39	30	34	1.92	−1.14	1.25	0	6	16	11	3	s.	William D. Martin.
Sandy Hook	Monmouth	22	34	68.2	+1.1	87	2	45	30	24	2.28	−1.15	1.05	0	7	12	9	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	67.4	+0.7	92	2	39	30	34	1.96	−1.08	1.25	0	8	16	8	6	s.	
For the State	......	......	....	66.4	+1.0	100	1	27	26	54	2.29	−1.32	2.70	0	7	16	8	6	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for September, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware				.06		.18																	T.				.20	.50				0.94
Charlotteburg	Passaic	.25	.32		.12	.02	2.70										.27											.12	.66				4.46
Culvers Lake	Delaware	T.	.65		T.		.20																	T.	T.			.43	.42				1.70
Dover	Passaic		1.37		.21		.64										.23									.04		.15	.55				3.19
Layton	Delaware		.65		T.	.04																						.18	.34				1.21
Long Valley	Morris	.51	.22		T.		.41										T.							.16					.87				2.17
Newton	Delaware		2.37		.08		.16																			T.		.42	.63				3.66
Phillipsburg	...do				.06	.32	.03																	.15				.25	.30				1.11
Sussex	Hudson		.25		.04		.40																			.04		.23	.71				1.67
The Red Sandstone Plain.																																	
Boonton‖	Passaic	.15	1.34		T.	T.	.49										.02	.37								.02		.09	.41	.12			3.01
Canoe Brook ‖	Essex	.03	1.11		.01	T.	.43										.27	.27										.11	.48	.03			2.74
Chatham ‖	...do	.06	1.31			.09	.57										.28	.30										.09	.54	.13			3.37
Elizabeth	Coast		.40		.02	.25	.46										.55					T.		T.	.01			.11	.25	T.			2.05
Flemington	Raritan		.22		T	.09	T.										.05							T.				.22	.43				1.01
Jersey City	Coast		.05		.02	T	.61										.60					T.		.10				.05	.11				1.54
Lambertville	Delaware		.07		.02	.03	.03										.32							.13				.28	.32				1.20
Little Falls ‖	Passaic		.46		.03	T.	.34										.26	.37					.12			.01		.06	.49	.08			2.22
New Brunswick	Raritan	.06	2.33			.18	.02										.61	T										.14	.12				3.46
New Milford‖	Hackensack		.10				.23										.08	.40										.05	.42	.07			1.35
Paterson	Passaic	.05	.04	T.	.03		.11										.65		.02			.01	.02	.01				.05	.34				1.33
Plainfield	Raritan		1.33		.18	T.	.04										.69							T.				.08	.37		.01		2.70
Ridgefield**	Hackensack		.02		.02	.02	.58										.50							T.				.10	.71				1.95
Somerville	Raritan	.01	1.86			.08	.01										.55											.16	.20				2.87
Woodcliff Lake‖	Hackensack		.07		.11	.02	.35										.14	.40										.07	.33	.05			1.54
New York, N. Y***	Coast		.05		.03	.47	.12										.62				T.			.10				.05	.12				1.56
The Southern Interior.																																	
Belleplain	Tuckahoe		1.70			T.	.29										.40											*	.61				3.00
Bridgeton	Coast	T.				.20										.04	.67											.21	.12				1.24
Burlington	Delaware	1.90	.10				.14										.73											.48	.30				3.65
Camden***	..do				T.	.09	.11										.75						T.	.04				.33	.09				1.41
Clayton	...do																																
Freehold	Raritan		.76				.04										.70							.30				.27	.20				2.27
Hammonton	Mullica	1.12	.05			.10	.20									.02	.64							.13	T.			.20	.09				2.55
Hightstown	Raritan	.36	1.13				.07										.71							.06				.26	.20				2.79
Indian Mills	Mullica		1.15			.20	.22										.66								.25			.18	.06				2.72
Lakewood	Metedeconk	.08	.25	T.		.60	.16									T.	.80							.02	.02			.17	.08				2.18
Moorestown‖	Delaware	1.00					.27										.35	.42										.37	T.	.12			2.53
Northfield	Coast	.09	.30				.28									.02	.67							.02				.11	.15				1.64
Pemberton	Delaware	.22	1.78			.04	.14										.53							.03				.21	.17				3.12
Pleasantville‖	Coast	.38	.20				.59										.57	.22							.25			T.	.30				2.51
Port Norris	Maurice	.28				.23	.42										.45											.07	.17				1.62
Runyon	Coast		1.77			.22											.72											.14	.22				3.07
Trenton***	Delaware		1.54		T	.03	.02									T.	.56							.03				.35	.17				2.70
Trenton No. 2‖	...do	1.69	1.78			T.	.04										.36	.21							.11				.41				4.60
Tuckerton	Coast	.11	.27			.07	.03										.72							.22	.52			.14	.10				2.18
Phila., Pa***	Delaware				T.	.08	.11										.36							.05				.31	.14				1.05
The Sea Coast.																																	
Asbury Park	Coast	.01	.17			.25	.05									.01	1.05							.02				.17	.15				1.88
Atlantic City***	...do		.05			T.	.14									.05	1.10							.05	.07			.12	.17				1.75
Long Branch**	...do		.38	T.	T	.04	.03									T.	1.25							T.				.12	.10				1.92
Sandy Hook***	...do		.76		.01	T.	.01										1.05							.27		T.	.11	.07					2.28

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.08	30.51	26	29.50	16	14.2	41	n.	16	81	66	72	57
amden		30.51	26	29.54	16	8.0	25	n.	8				
ong Branch	30.07	30.52	26	29.50	16					78	63	69	
ew York, N. Y	30.06	30.53	26	29.49	16	13.3	46	nw.	16	77	55	67	64
hiladelphia, Pa	30.08	30.53	26	29.57	16	12.0	40	n.	8	74	47	54	69
idgefield	30.06	30.53	26	29.50	16								
andy Hook	30.05	30.49	26	29.49	16	14.4	44	ue.	8	76	58	72	67
renton	30.07	30.50	26	29.55	16	9.9	34	n.	8	76	49	65	75

Daily Temperatures for September, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	96	95	89	87	91	86	76	76	83	80	83	88	89	76	84	73	79	80	79	85	91	85	81	76	73	75	64	75	73	68	....	81.2
	Minimum	70	70	67	73	68	65	48	53	59	43	41	42	58	51	61	61	49	43	41	51	58	58	58	48	47	34	52	59	41	33	....	53.4
Charlotteburg	Maximum	91	94	90	85	88	88	76	72	74	76	75	84	84	83	80	78	72	72	80	86	87	82	83	76	72	72	68	72	65	60	....	78.9
	Minimum	68	67	64	71	62	63	46	49	54	49	34	36	34	44	52	55	50	40	33	44	55	52	52	48	44	27	42	55	36	33	....	48.6
Dover	Maximum	94	90	82	81	86	79	68	71	77	70	73	81	82	74	78	68	70	71	69	82	84	79	81	73	65	68	61	71	66	58	....	75.1
	Minimum	69	69	65	71	67	58	48	51	54	41	39	43	48	48	57	60	52	46	37	50	57	56	56	50	43	32	52	47	40	35	....	51.4
Layton	Maximum	98	90	88	80	89	77	69	75	78	75	80	88	85	75	79	73	74	73	74	86	92	85	78	74	68	71	60	71	65	62	....	77.7
	Minimum	68	67	59	60	66	54	42	48	55	35	37	34	47	44	51	55	50	39	32	46	55	53	55	41	40	29	40	46	35	26	....	47.0
Long Valley	Maximum	95	90	83	85	87	80	69	74	77	74	76	83	80	75	78	70	72	73	73	81	86	82	80	74	74	69	65	72	66	61	....	76.8
	Minimum	66	68	63	72	67	64	47	50	58	42	36	37	42	52	55	58	52	43	36	47	55	55	53	47	46	29	44	45	39	33	....	50.0
Newton	Maximum	95	90	88	85	88	91	72	75	78	75	79	76	75	78	80	72	72	75	73	86	89	84	84	82	76	71	60	71	67	63	....	78.3
	Minimum	60	66	62	68	66	60	46	47	54	42	42	45	48	52	62	58	49	44	42	50	53	55	56	48	43	35	49	48	44	33	....	50.9
Phillipsburg	Maximum	95	92	86	82	88	83	73	76	82	80	77	85	85	76	80	74	77	77	78	85	86	82	81	75	71	72	62	73	69	63	....	78.8
	Minimum	69	71	67	72	64	65	50	52	59	42	44	42	45	51	59	62	53	45	41	52	57	56	57	47	43	34	51	50	41	35	....	52.5
Sussex	Maximum	100	92	91	82	91	78	71	82	79	82	85	92	89	80	82	78	75	75	72	87	90	87	83	73	77	74	62	71	66	63	....	80.3
	Minimum	69	70	65	71	66	65	48	51	57	41	41	42	46	49	62	60	53	42	38	50	58	57	56	48	45	32	50	49	40	34	....	51.8
The Red Sandstone Plain.																																	
Boonton§§	Maximum	93	93	88	89	88	88	72	83	81	75	79	85	85	79	80	77	73	73	71	87	88	82	86	75	69	72	67	76	68	63	....	79.5
	Minimum	66	69	65	70	69	67	50	54	52	41	38	40	45	47	52	55	55	43	38	43	53	55	54	47	44	32	44	53	43	35	....	50.6
Canoe Brook§§	Maximum	94	94	85	87	90	84	79	74	79	74	77	85	85	81	80	70	73	73	71	84	87	81	84	78	75	71	69	77	69	67	....	79.2
	Minimum	66	69	63	72	70	66	44	52	48	35	39	39	43	47	50	56	52	41	35	49	57	53	52	44	35	28	44	55	36	30	....	49.0
Elizabeth	Maximum	94	95	86	88	90	88	72	71	81	77	80	....	88	81	80	70	76	76	72	86	93	82	88	78	71	73	65	77	72	65	....	79.8a
	Minimum	70	71	72	73	72	69	51	56	57	47	45	....	47	53	56	64	54	49	45	55	60	59	58	52	48	38	48	62	43	38	....	55.6a
Flemington	Maximum	98	92	88	86	90	87	76	74	80	78	85	90	88	80	80	73	79	80	79	85	92	91	83	78	74	74	71	76	74	69	....	81.7
	Minimum	69	70	70	73	70	70	48	53	60	45	42	45	46	52	56	64	55	46	42	52	60	58	55	49	49	35	50	61	43	36	....	54.1
Jersey City	Maximum	90	93	84	84	87	84	70	71	80	75	80	83	85	78	78	69	72	72	70	82	82	81	84	75	70	72	67	74	70	63	....	77.5
	Minimum	70	71	72	72	68	67	54	55	60	53	55	58	58	62	62	62	55	56	56	59	64	64	62	57	50	52	53	59	47	41	....	59.1
Lambertville	Maximum	94	93	83	86	89	83	72	74	79	75	80	85	83	81	87	70	73	76	72	83	87	81	86	76	70	71	61	74	69	61	....	78.5
	Minimum	71	70	68	72	74	57	49	54	58	45	45	52	55	57	58	64	53	48	48	53	60	58	58	52	45	41	52	53	46	36	....	55.1
Little Falls§§	Maximum	96	97	89	88	92	86	78	74	81	78	82	89	88	80	84	71	75	76	73	89	90	84	87	79	73	75	68	77	70	65	....	81.1
	Minimum	67	70	67	73	71	68	50	55	55	45	41	42	48	49	53	62	54	44	40	51	58	58	56	51	47	35	49	55	41	37	....	53.1
New Brunswick	Maximum	93	92	89	86	82	85	75	72	77	75	78	85	83	80	77	70	74	74	76	81	83	80	83	75	70	71	63	75	69	62	....	77.8
	Minimum	69	69	69	71	76	71	50	55	57	51	46	48	50	52	56	64	53	48	48	55	60	59	57	52	51	39	49	62	44	38	...	55.6
Paterson	Maximum	93	94	88	84	90	85	76	72	79	74	77	81	89	80	81	72	74	74	72	82	85	80	84	75	67	71	62	75	68	62	....	78.2
	Minimum	69	72	70	73	73	70	55	55	61	50	46	49	54	53	58	64	54	49	46	55	67	61	60	55	49	40	52	61	46	38	....	56.8
Plainfield	Maximum	93	94	84	84	88	84	71	72	80	77	80	85	86	82	80	69	72	73	72	84	84	82	84	75	70	72	68	75	70	64	....	78.5
	Minimum	67	70	68	70	71	68	50	54	55	44	42	44	48	49	53	63	54	51	42	53	58	57	56	51	47	37	46	60	42	40	....	53.7
Ridgefield	Maximum	90	96	84	86	90	86	71	72	81	76	81	88	85	78	79	68	75	77	71	84	85	82	87	78	70	71	64	76	71	61	....	78.8
	Minimum	69	72	68	74	72	57	52	55	55	50	44	46	52	51	56	64	54	48	43	55	59	61	55	53	48	38	52	50	44	36	....	54.4
Somerville	Maximum	96	93	85	87	91	87	72	76	80	76	81	87	85	83	82	71	77	78	78	84	87	83	87	....	78	75	64	78	72	66	....	80.7
	Minimum	69	69	69	73	71	58	48	54	58	41	41	44	46	49	52	64	50	45	40	52	58	56	55	....	48	33	49	52	40	35	....	52.4
New York, N. Y.	Maximum	87	92	83	84	85	83	69	69	77	73	78	81	83	75	75	69	72	72	67	81	80	80	82	75	66	70	65	73	68	61	....	75.8
	Minimum	71	71	73	72	68	62	55	55	61	54	56	59	59	64	64	62	56	57	57	60	64	65	62	57	50	53	54	59	48	41	....	59.6
The Southern Interior.																																	
Belleplain	Maximum	92	92	87	89	87	86	70	71	79	74	79	80	81	80	77	71	75	76	77	84	85	79	85	76	70	73	73	76	72	63	....	78.6
	Minimum	76	69	72	72	72	69	49	55	55	45	38	41	49	50	58	63	51	46	41	52	58	57	60	55	42	32	32	64	37	44	....	53.5
Bridgeton	Maximum	92	94	90	84	86	75	71	73	79	79	68	83	83	80	83	80	76	78	75	85	85	83	88	88	73	73	67	78	71	64	....	79.5
	Minimum	70	72	73	71	71	53	57	55	47	50	46	48	52	56	60	63	55	52	49	56	61	59	66	57	49	42	53	58	44	40	....	56.5
Burlington	Maximum	95	94	86	90	86	85	71	75	80	79	82	85	83	80	80	73	75	75	80	88	89	82	83	77	73	71	66	75	71	67	....	79.9
	Minimum	70	78	72	71	70	59	54	55	61	50	47	55	57	55	58	65	57	47	54	62	60	60	61	55	48	45	51	63	43	41	....	57.5
Camden	Maximum	93	92	87	91	91	85	72	75	81	75	82	85	85	85	82	74	77	76	80	85	86	80	90	77	69	75	69	77	70	63	..	80.3
	Minimum	71	74	72	72	74	64	56	56	60	52	45	51	50	53	60	64	55	50	48	56	62	60	64	55	50	41	54	58	48	43	....	57.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	93	92	85	85	89	85	80	71	79	78	76	85	84	82	79	70	75	74	74	81	84	80	87	74	68	71	63	75	70	61	....	78.3
	Minimum	68	68	70	68	70	69	49	55	56	45	50	50	50	56	56	64	52	50	46	57	61	58	58	52	47	38	50	46	58	35	....	55.1
Hammonton	Maximum	95	94	91	89	88	88	73	72	82	78	81	85	85	84	82	70	77	77	78	86	90	82	89	77	71	74	67	77	73	65	....	80.7
	Minimum	66	69	70	68	69	67	45	52	52	40	39	43	55	51	55	61	48	43	42	53	57	55	58	50	41	34	48	52	41	32	....	51.9
Hightstown	Maximum	94	93	84	88	86	84	72	71	79	75	79	84	88	85	89	69	75	77	79	80	84	80	89	75	69	74	70	76	70	66	....	79.5
	Minimum	70	70	68	74	77	70	49	55	55	45	45	51	51	58	58	64	51	46	45	55	58	55	58	52	48	36	48	60	43	37	....	55.1
Indian Mills	Maximum	93	90	87	88	86	86	72	72	79	73	78	86	85	82	80	70	76	76	79	83	91	80	90	76	68	75	64	76	72	64	. ..	79.2
	Minimum	68	70	72	72	71	69	48	55	57	44	40	42	46	53	56	64	48	44	44	56	59	59	59	54	45	34	46	61	38	34	....	53.6
Lakewood	Maximum	89	90	83	88	85	84	77	70	79	77	73	81	77	77	77	69	73	71	70	79	79	78	83	72	66	68	63	75	68	61	....	76.1
	Minimum	71	70	67	70	70	70	50	57	58	47	43	50	48	50	53	63	52	45	44	54	57	58	58	55	48	34	47	62	40	38	....	54.3
Moorestown	Maximum	92	92	86	88	88	87	71	73	80	74	80	83	83	81	81	71	76	76	77	83	86	80	87	75	69	72	65	75	70	63	....	78.8
	Minimum	70	74	74	71	73	59	51	54	56	46	44	50	49	53	57	64	53	47	46	54	60	58	61	54	48	38	52	63	44	38	....	55.4
Pemberton	Maximum	92	92	85	88	86	84	83	73	79	78	76	82	82	82	80	73	74	74	76	79	87	86	85	75	70	72	64	75	69	65	....	78.9
	Minimum	72	72	71	71	72	70	51	55	57	46	43	46	47	55	58	65	57	48	48	57	60	58	58	54	49	37	50	62	43	38	....	55.7
Pleasantville§§	Maximum	85	87	87	84	82	86	73	70	80	68	78	81	76	77	75	71	75	73	73	84	84	74	85	72	68	69	69	76	71	63	....	76.5
	Minimum	69	70	72	74	74	68	51	56	51	47	39	48	49	52	59	64	51	48	44	57	59	62	58	57	48	37	55	58	40	40	. ..	55.3
Runyon	Maximum	96	97	84	92	90	86	75	73	82	79	81	86	86	82	79	78	77	78	76	84	87	86	85	80	79	72	68	76	71	71	....	81.2
	Minimum	65	69	66	66	67	67	45	55	48	36	35	36	36	36	40	47	50	40	37	52	50	51	50	44	42	26	38	39	34	29	....	46.5
Trenton	Maximum	93	92	84	87	87	84	70	74	78	72	78	83	81	79	79	72	73	74	76	81	86	78	87	74	67	71	64	75	67	62	....	77.6
	Minimum	70	71	71	71	73	63	54	54	60	52	50	53	55	58	59	63	54	51	51	58	62	61	61	55	52	48	53	55	49	41	....	57.6
Tuckerton	Maximum	88	92	87	85	84	81	72	70	75	75	75	78	80	74	77	75	78	75	77	85	82	79	88	73	70	72	75	76	73	70	....	78.0
	Minimum	75	72	68	71	72	70	50	50	50	51	52	48	50	45	55	50	50	50	56	60	69	60	61	48	48	55	60	64	45	36	....	56.4
Philadelphia, Pa.	Maximum	97	93	88	89	88	86	72	76	81	77	79	82	83	80	81	75	76	76	77	85	85	79	88	75	70	72	69	75	70	64	....	79.6
	Minimum	74	76	75	75	75	65	60	58	64	58	57	60	62	63	65	66	58	59	56	62	68	64	66	58	53	53	56	60	52	45	....	62.1
The Sea Coast.																																	
Asbury Park	Maximum	82	85	79	79	81	81	78	70	80	70	70	83	76	77	74	70	77	71	68	76	73	74	85	73	67	68	67	75	69	61	....	74.6
	Minimum	72	71	73	73	72	71	56	58	60	57	52	55	56	64	64	65	56	53	54	63	64	65	60	58	54	47	57	60	49	41	....	60.0
Atlantic City	Maximum	82	84	82	81	80	87	70	70	79	67	73	77	74	75	74	71	75	71	72	83	83	72	77	70	66	69	69	75	71	63	....	74.7
	Minimum	71	71	75	75	75	65	57	58	61	56	53	59	62	67	68	64	57	57	59	67	68	65	64	60	53	52	58	56	51	46	.. .	61.7
Long Branch	Maximum	87	92	80	85	86	86	71	70	79	72	72	84	80	76	74	68	72	73	70	76	75	74	82	71	66	67	66	73	67	61	....	75.2
	Minimum	71	70	71	73	72	65	58	58	62	52	48	50	52	56	57	64	53	49	49	56	59	60	58	56	46	42	51	49	45	39	....	56.4
Sandy Hook	Maximum	84	87	78	83	85	85	70	70	76	70	73	82	78	73	72	70	73	73	67	78	75	75	81	71	66	66	68	75	68	61	....	74.4
	Minimum	71	71	73	74	73	66	59	59	65	58	58	58	60	64	65	64	60	60	59	62	65	64	63	61	56	56	58	59	52	45	....	61.9

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.168	.160	.176	.256	.046	.288	.176	.160	.256	.288	.272	.256	.160	.256	*	.134	.224	.160	.160	.160	.144	.144	.186	.192	.160	.144	.012	.080	.096	.160	....	5.07
	Wind movement	36	4	70	58	60	45	54	83	132	62	51	24	37	46	58	75	122	41	31	47	24	44	34	49	51	49	29	54	56	42	...	156
Runyon	Evaporation	.090	210	.180	.180	.190	.180	.140	.180	.210	.180	.150	.150	.150	.150	.150	.060	.150	.150	.150	.120	.120	.120	.120	.120	.120	.120	.050	.020	.120	.120	....	4.15
	Wind movement	11	15	29	34	17	23	14	64	27	11	21	19	17	29	36	56	52	14	19	16	20	13	12	12	14	31	42	21	32	12	....	73

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. OCTOBER, 1932. No. 10.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The temperature was above the normal almost daily, except for short cool periods that came on the 7th, from the 11th to 14th, inclusive, and the last day or two of the month. However, the average for the State was less than one and one-half degrees above the normal, this indicating the rather even nature of the course of the temperature throughout the month. The highest points recorded were mostly in the low eighties, on the 2-3d, while the lowest were quite generally at the freezing point or below, and were registered on the 14th in the Red Sandstone Plain and Highlands, and on the 31st in the Southern Interior and Sea Coast sections.

There was a decided break in the semi-drought which has prevailed almost throughout the growing season with the exception of the month of June. The average for the State for October was 159% of the normal, ranging from a low of 107% in the Sea Coast section to 197% in the Highlands and Kittatinny Valley. One station in the latter district received nearly ten inches of rain. There were about four rainfall periods. One on the 5-6th with from one to two inches general on the 6th, with stations in Sussex and Warren counties reporting from four to nearly six inches. Another period came from the 16th to 20th, with heavy rains of one to four inches reported on the 18th. Light amounts fell during the 23d-24th, and were followed on the 27th by heavier amounts averaging nearly an inch. The totals for the month ranged mostly between four and seven inches, except in the Highlands where they were mostly between six and nine inches.

No snow was reported from any station and no damage by high winds.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 56.2°, which was 1.4° above normal. The highest temperature was 89° at Bridgeton on the 4th, and the lowest, 21°, at Runyon on the 31st. The greatest daily range of temperature was 46° at Canoe Brook on the 9th. The highest monthly mean temperature was 59.2° at Tuckerton, and the lowest, 52.6° at Layton.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +2.4°; Red Sandstone Plain, +2.0°; Southern Interior, +1.9°; Sea Coast, +2.2°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 5.85 inches, which was 2.18 inches above normal. The greatest monthly precipitation was 9.64 inches, at Charlotteburg, and the least, 3.53 inches at Asbury Park. The greatest amount of precipitation in any 24 consecutive hours was 5.86 inches at Phillipsburg on the 6th. The mean of the number of days on which 0.01 inch or more precipitation fell was 10, or 2 more than normal.

The precipitation accumulated departure from the normal for the year 1932, to date, by sections, is: The Highlands, —2.76 inches; Red Sandstone Plain, —6.66 inches; Southern Interior, —0.19 inches; Sea Coast, —5.91 inches.

WIND.

The prevailing wind direction was from the West. The wind movement averaged 13 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 49 miles per hour from the East at Atlantic City on the 17th.

MISCELLANEOUS.

The per cent of possible sunshine was 53, or 10 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.04 inches, or 0.03 inch below normal. The highest reading was 30.48 inches at Long Branch on the 31st, and the lowest 29.52 inches at Sandy Hook on the 6th.

The mean stage of the Delaware River at Phillipsburg was 2.7 feet, and the highest 11.0 feet on the 8th. The mean stage at Trenton was 1.6 feet, and 7.8 feet on the 8th.

Killing frosts occurred on the 14th in the northern portion of the State and on the 31st in the southern section. Only the immediate coast has as yet not experienced frost. Dense fog was noted at various stations on the following dates: 3, 4, 9, 10, 15. 16, 17, 18, 19 and 26.

ERRATA.

January 1932. Lambertville highest temperature should be 71° on the 14th. Runyon lowest temperature should be 17° on the 26th. Northfield greatest precipitation in 24 hours should be 1.14 on the 9th.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature			Precipitation			No. of days			
	Mean	Highest	Lowest	Mean	Greatest	Least	Clear	Partly Cloudy	Cloudy	.01 inch or more prec.
1885	54.2	82	29	4.20	5.85	2.91	.....	.....	.....	.....
1886	55.6	88	21	3.22	8.16	2.02	.....	.....	.....	.....
1887	52.3	89	21	2.61	5.00	1.58	.....	.....	.....	7
1888	49.2	73	25	4.73	7.00	2.97	.....	.....	10	12
1889	50.8	82	23	3.80	5.03	2.42	.....	.....	12	11
1890	53.9	81	24	6.33	10.18	3.40	9	8	14	13
1891	52.8	92	18	3.44	5.57	1.88	11	11	9	8
1892	53.6	85	21	0.52	1.09	0.04	14	12	5	4
1893	55.2	85	17	4.22	6.59	1.74	15	7	9	7
1894	55.3	87	27	5.67	8.23	3.90	12	7	12	10
1895	49.9	83	18	3.60	5.53	1.62	19	7	5	5
1896	51.5	82	21	2.24	4.58	1.72	11	8	12	8
1897	55.8	**95**	22	2.43	6.49	0.87	14	8	9	7
1898	56.5	88	24	5.76	8.42	3.92	13	9	9	10
1899	56.6	86	18	2.72	4.65	1.07	13	10	8	6
1900	**59.9**	92	19	3.70	6.59	1.47	**10**	8	13	10
1901	54.4	82	21	1.93	4.45	0.87	17	8	6	4
1902	56.0	80	20	6.39	9.35	3.82	15	7	9	8
1903	55.9	86	24	**8.92**	**16.19**	4.17	13	9	9	8
1904	51.9	89	15	3.78	7.01	1.50	20	6	5	5
1905	55.5	90	17	2.71	4.83	0.75	18	7	6	7
1906	55.0	80	**11**	4.46	7.14	2.66	8	9	14	11
1907	50.6	80	18	4.46	7.18	2.70	22	5	4	7
1908	57.3	92	19	2.71	5.14	1.30	15	5	11	8
1909	51.2	84	18	1.18	1.82	0.40	17	7	7	8
1910	57.2	90	18	3.15	5.55	1.55	15	8	8	7
1911	53.9	80	18	5.49	8.23	2.61	10	9	12	12
1912	57.0	88	25	3.30	6.95	1.72	17	8	6	5
1913	57.8	83	25	7.79	13.84	2.70	12	9	10	11
1914	58.1	88	19	1.99	3.08	0.90	13	9	9	5
1915	56.2	84	23	3.03	5.18	1.89	17	7	7	9
1916	55.1	92	23	1.37	2.38	0.51	18	8	5	4
1917	50.7	84	22	6.99	9.74	4.28	15	8	8	10
1918	57.0	84	22	1.25	2.36	0.74	16	9	6	8
1919	59.0	92	25	3.43	4.97	2.01	9	8	14	13
1920	59.0	87	28	1.80	4.53	0.55	20	5	6	5
1921	54.1	82	16	0.97	2.18	0.33	18	7	6	5
1922	56.6	92	18	1.48	2.70	0.55	19	6	6	7
1923	53.9	81	21	4.25	6.37	2.35	16	8	7	8
1924	54.4	84	16	**0.31**	2.76	**T.**	23	6	2	1
1925	**49.1**	84	12	4.59	5.78	3.38	9	9	13	11
1926	53.1	90	17	4.08	6.03	1.79	13	8	10	11
1927	56.8	94	23	7.82	14.07	2.81	18	5	8	10
1928	56.1	90	16	1.19	2.58	0.24	17	9	5	6
1929	52.3	80	17	4.61	7.35	2.62	15	8	8	8
1930	52.6	89	12	1.95	3.70	0.93	17	7	7	6
1931	58.3	92	24	2.76	4.69	1.67	17	7	7	8
1932	56.2	89	21	5.85	9.64	3.53	13	6	12	10
Normal	54.8	....	....	3.67	....	....	15	8	8	8
Extremes	....	95	11	....	16.19	T.	.....	.....	.....	.....

W. B. O. Philadelphia-⌑-26-32-830.

Climatological Data for October, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	55.1	+1.3	83	3	29	14	38	8.46	+4.79	5.20	0	12	14	2	15	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	53.5	+1.9	80	3†	22	14	41	9.64	+5.17	4.91	0	9	15	4	12	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	29	14	....	6.72	+2.54	4.05	0	8	16	3	12	e.	Brice E. Riker.
Dover	Morris	600	48	53.4	+2.1	77	3	28	14	32	7.08	+3.01	2.80	0	9	5	15	11	......	William C. Harris
Layton	Sussex	480	31	52.6	+1.1	81	3	25	14	42	7.80	+4.18	4.87	0	8	8	2	21	sw.	A. M. Depue.
Long Valley	Morris	520	1	53.8	......	77	2†	26	14	37	6.23	....	2.02	0	8	17	2	12	se.	S. N .Dilts.
Newton	Sussex	769	48	53.3	+0.6	80	30	26	14	36	5.63	+2.00	2.66	0	9	11	5	15	se.	Irving J. Kern.
Phillipsburg	Warren	363	§49	55.2	+1.3	80	2†	32	14†	33	9.34	+5.78	5.86	0	10	10	9	12	......	Town Engineer.
Sussex	Sussex	442	37	54.7^{b}	+1.5	82	3	28	14	38	4.81	+1.37	2.30	0	9	16	5	10	......	A. J. W. Mowatt
Means and extremes	......	......	....	54.0	+1.4	83	3	22	14	42	7.30	+3.60	5.86	0	9	13	5	13	se.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	55.4	+2.6	85	2	26	14	38	6.98	+3.07	2.40	......	8	13	1	17	sw.	John Kline.
Canoe Brook	Essex	173	2	55.6	......	86	3	24	14†	46	7.37	....	3.47	......	9	18	1	12	w.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	6.89	+2.68	2.68	......	10	17	5	9	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	57.2	+1.8	82	2†	31	14	43	4.68	+0.79	1.70	0	8	16	5	10	ne.	Union County Park Comm.
Flemington	Hunterdon	140	§46	57.5	+1.5	83	3	30	14†	37	4.61	+0.95	1.61	0	11	15	5	11	nw.	Hiram E. Deats.
Jersey City	Hudson	10	34	57.5	+1.2	78	2	39	13†	25	5.21	+1.53	2.62	0	9	8	10	13	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	55.5	+0.9	81	3	31	31	33	5.12	+1.64	1.73	0	12	15	4	12	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	56.6	+1.7	82	2†	28	14	39	9 33	+4.82	4.38	0	10	13	6	12	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	56.4	+1.6	81	3	30	14	34	4.93	+1.35	1.97	0	10	15	8	8	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	5.08	....	2.11	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	56.6	+1.4	79	5	32	14	33	5.43	+1.34	2.57	0	9	10	6	15	w.	Philip Del Vecchio.
Plainfield	Union	120	44	55.7	+1.5	82	3	30	14†	36	6.36	+2.21	3.14	0	9	9	10	12	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	56.2	......	80	2†	31	14	31	6.56	....	4.20	0	9	10	8	13	s.	George P. Kirsten.
Somerville, (near)	Somerset	70	49	56.2	+1.9	84	2	29	14†	39	5.43	+1.99	1.74	0	10	10	6	15	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	5.80	....	2.03	......	9	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	62	57.6	+1.3	76	2	39	13	23	5.03	+1.50	3.05	0	9	7	10	14	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	56.4	+1.6	86	3	24	14†	46	5.99	+2.03	4.38	0	9	13	6	12	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	56.7^{a}	+0.4	81	3	25	31	39	6.53	+3.11	2.39	......	7	6	6	19	se.	A. F. Waldron.
Bridgeton	Cumberland	30	49	56.6	−0.8	89	4	30	31	32	5.59	+2.00	1.72	0	8	17	4	10	sw.	Bennett K. Matlack
Burlington	Burlington	12	§46	59.6	+1.4	85	3	32	15†	37	5.55	+1.90	2.05	0	8	12	10	9	sw.	Public Service Power Co.
Camden	Camden	20	....	57.8	......	84	3	32	31	35	4.42	....	2.00	0	11	11	7	13	nw.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	....	......	......	...	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	56.6	......	81	3	31	14†	32	5.95	+2.43	1.93	0	8	14	5	12	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	56.2	......	84	3	26	31	42	5.99	+2.44	2.24	0	10	15	8	8	w.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	38	57.2	+2.0	83	3†	29	31	40	4.65	+0.94	1.55	0	8	13	7	11	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	43	57.0	+1.5	84	3	28	31	41	6.29	+2.85	2.38	0	8	12	7	12	se.	James M. Armstrong.
Lakewood	Ocean	54	28	55.7	−0.6	77	2†	30	31	33	4.41	+0.82	1.95	0	8	15	4	12	nw.	R. W. Holman.
Moorestown	Burlington	......	69	55.9	+1.2	81	3	31	31	36	4.40	+0.83	1.89	0	10	15	1	15	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	4.79	+2.01	1.60	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	57.1	......	82	3	29	31	34	5.66	....	1.85	0	10	14	2	15	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	57.4	......	77	3	26	31	35	4.93	+1.49	2.36	......	9	14	5	12	ne.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	5.63	....	2.84	0	6	15	6	10	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	54.4	......	82	3	21	31	44	5.28	....	2.00	......	8	16	7	8	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	57.0	+1.4	81	3	36	14	28	4.69	+1.91	2.00	0	10	11	7	13	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	5.86	....	2.27	0	9	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	59.2	+3.1	78	2	29	31	30	5.56	+2.03	2.54	0	8	15	9	7	w.	John H. Brown.
Philadelphia, Pa	......	117	61	59.6	+1.8	81	3	41	14	25	4.30	+1.49	2.33	0	9	10	8	13	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	56.9	+1.2	89	4	21	31	44	5.34	+1.90	2.84	0	9	13	6	12	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	57.2	+1.4	75	1	37	31	25	3.53	−0.18	1.10	0	10	19	8	4	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	58.8	+1.9	74	1	39	31	26	4.63	+1.43	1.93	0	9	13	4	14	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	55.9	−0.4	80	2	32	29	30	5.12	+1.07	1.63	0	10	10	8	13	se.	William D. Martin.
Sandy Hook	Monmouth	22	34	58.0	+1.0	76	2	43	31	20	4.05	+0.27	2.54	0	10	14	4	13	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	57.5	+1.0	80	2	32	29	30	4.33	+0.65	2.54	0	10	14	6	11	w.	
For the State	......	......	....	56.2	+1.4	89	4	21	31	46	5.85	+2.18	5.86	0	10	13	6	12	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for October, 1932

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	....	....	....	.10	.70	5.20	....	....	....	....	T.	.03	....	....	....	.06	.50	1.00	.03	.02	....	....	.12	.06	....	T	.64	....	....	....	....	8.46
Charlotteburg	Passaic	....	....	....	....	.78	4.13	....	....	....	....	....	....	....	....	....	....	.75	3.11	.13	.03	....	....	....	.11	....	.01	.59	....	....	....	....	9.64
Culvers Lake	Delaware	....	....	....	....	.38	4.05	....	....	....	....	....	....	....	....	....	.02	.75	1.27	.05	....	....	....	T.	.10	....	.10	....	....	....	....	....	6.72
Dover	Passaic	....	....	....	.01	.51	2.80	....	....	....	....	....	....	....	....	....	*	.99	2.06	.03	....	....	....	.06	....	....	....	.62	....	....	....	....	7.08
Layton	Delaware	....	....	....	....	.54	4.87	....	....	....	....	T.	....	....	....	....	.11	.69	.90	.12	T.	....	....	....	.12	....	....	.45	....	....	....	....	7.80
Long Valley	Morris	....	....	....	.04	1.11	2.02	....	....	....	....	....	....	....	....	....	....	.76	1.62	....	....	....	....	04	....	T.	.03	.61	....	....	....	....	6.23
Newton	Delaware	....	....	....	T.	.78	2.66	....	....	....	....	....	T.	....	....	....	.03	.48	.90	.04	.03	....	....	.06	....	....	....	.65	....	....	....	....	5.63
Phillipsburg	...do	....	....	....	.11	.85	5.86	....	....	....	....	T.	.04	T.	....	....	.12	.89	.49	.04	T.	....	....	.05	T.	....	T.	.89	....	....	....	....	9.34
Sussex	Hudson	....	....	....	....	.10	2.30	....	....	....	....	....	....	....	....	....	.02	*	*	1.45	....	....	....	.02	.05	....	....	.87	....	....	....	....	4.81
The Red Sandstone Plain.																																	
Boonton ‖	Passaic	....	....	....	....	.46	1.13	1.77	....	....	....	T.	....	T.	....	....	....	.25	2.40	.16	T.	....	....	....	.02	....	T.	.79	....	....	....	....	6.98
Canoe Brook ‖	Essex	....	....	....	....	.37	1.09	1.40	....	....	....	....	....	....	....	....	....	.19	3.47	.18	.03	....	....	....	.02	....	....	.62	....	....	....	....	7.37
Chatham ‖	...do	....	....	....	....	.31	1.06	1.37	....	....	....	T.	.03	T.	....	....	....	.34	2.68	.22	.07	....	....	T.	.07	....	T.	.74	....	....	....	....	6.89
Elizabeth	Coast	....	....	....	....	.42	1.34	....	....	....	....	....	....	....	....	....	....	.45	1.70	.04	.06	....	....	T	....	....	.02	.65	....	....	....	....	4.68
Flemington	Raritan	....	T.	....	.01	.64	1.61	....	....	....	....	....	T.	T.	....	....	.16	.53	1.01	.03	.02	....	....	.02	.02	....	....	.56	....	....	....	....	4.61
Jersey City	Coast	....	....	....	....	.15	1.25	....	....	....	....	T.	T.	....	....	....	.02	.50	2.62	.02	.02	....	....	T.	.01	....	T.	.62	T.	....	....	....	5.21
Lambertville	Delaware	....	.01	..	.02	.50	1.54	....	....	....	....	....	T.	.05	....	....	.17	.45	1.73	.06	.02	....	....	T.	.04	....	....	.54	....	....	....	....	5.12
Little Falls. ‖	Passaic	....	....	....	....	.61	1.53	1.59	....	....	....	....	....	T.	....	....	....	.13	4.38	.29	.01	....	....	....	.03	....	.01	.75	....	....	....	....	9.33
New Brunswick	Raritan	....	....	....	....	.13	1.70	T.	....	....	....	....	T.	....	....	....	.05	.40	1.97	.04	.10	....	....	.02	.03	....	....	.49	....	....	....	....	4.93
New Milford ‖	Hackensack	....	....	....	....	.30	.45	1.12	....	....	....	....	....	....	....	....	....	.04	2.11	.18	.10	....	....	....	.09	....	....	.69	....	....	....	....	5.08
Paterson	Passaic	....	....	....	....	.04	1.44	....	....	....	....	....	T.	....	....	....	.01	.58	2.57	.06	....	....	....	T.	.06	....	.02	.65	....	....	....	....	5.43
Plainfield	Raritan	....	....	....	....	.22	2.15	....	....	....	....	....	T.	....	....	....	.10	.66	2.60	.09	T.	....	....	.01	.01	....	T.	.52	....	....	....	....	6.36
Ridgefield**	Hackensack	T	....	....	....	.38	.99	....	....	....	....	....	T.	....	....	....	.02	2.50	1.70	.07	.04	....	....	.01	....	....	T.	.85	....	T.	....	....	6.56
Somerville	Raritan	....	T.	....	....	.39	1.74	....	....	....	....	....	T.	....	....	....	.24	.94	1.52	.01	.03	....	....	.01	.04	....	....	.51	....	....	....	....	5.43
Woodcliff Lake ‖	Hackensack	....	....	....	....	.45	.54	1.29	....	....	....	....	....	....	....	....	....	.03	2.03	.50	.09	....	....	....	.14	....	....	.73	....	....	....	....	5.80
New York, N. Y***	Coast	....	....	....	....	.14	1.10	....	....	....	....	T.	T.	....	....	....	.02	1.02	2.06	.01	.02	....	....	.01	....	....	T.	.65	T.	....	....	....	5.03
The Southern Interior.																																	
Belleplain	Tuckahoe	....	....	....	....	.31	2.39	....	....	....	....	....	....	T.	....	....	.10	.94	1.52	T.	.03	....	....	....	....	....	....	1.24	....	....	....	....	6.53
Bridgeton	Delaware	....	....	....	....	.55	1.23	....	....	....	....	....	....	.06	....	....	.26	72	1.72	....	.03	....	....	T.	....	....	....	1.02	....	....	....	....	5.59
Burlington	Delaware	....	T.	....	T.	.22	2.05	....	....	....	....	....	....	T.	T.	....	.10	.69	1.81	T.	.03	....	....	.06	....	....	....	.59	....	....	....	....	5.55
Camden***	..do	....	....	....	T.	.72	.91	....	....	....	....	....	....	.03	....	....	.20	1.52	.50	.01	.01	....	....	.05	....	....	.02	.45	....	....	....	....	4.42
Clayton	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Freehold	Raritan	....	....	....	....	.32	1.93	..	....	....	....	....	....	T.	....	....	....	.60	1.80	.07	.03	....	....	....	.10	....	....	1.10	....	....	....	....	5.95
Hammonton	Mullica	....	....	....	....	.36	2.24	....	....	....	....	....	....	.25	....	....	.05	1.15	.79	.02	.03	....	....	T.	.03	....	....	1.07	....	....	....	....	5.99
Hightstown	Raritan	....	....	....	....	.15	1.37	....	....	....	....	....	....	....	....	....	....	.50	1.55	.07	.04	....	....	....	.05	....	..	.92	....	....	....	....	4.65
Indian Mills	Mullica	....	....	....	....	.35	2.38	....	....	....	....	....	....	T.	....	....	.06	.58	1.68	.11	....	....	....	....	....	....	.09	1.04	....	....	....	....	6.29
Lakewood	Metedeconk	....	....	....	....	.10	.63	....	....	....	....	....	....	T.	....	....	....	.50	1.95	.11	.05	..	..	T.	.12	....	....	.95	....	....	....	....	4.41
Moorestown ‖	Delaware	....	....	....	....	.21	.43	.80	....	....	....	....	....	....	T.	....	....	.26	1.89	.05	.03	....	....	....	.09	....	....	.60	.04	....	....	....	4 40
Northfield	Coast	....	....	....	....	.11	.82	....	....	....	....	....	....	.02	....	....	.01	.77	1.43	....	.03	....	....	....	....	....	....	1.60	....	....	....	....	4.79
Pemberton	Delaware	....	....	....	....	.33	1.85	....	....	....	....	....	....	.02	T.	....	.05	.68	1.58	.01	.04	....	....	T.	.09	....	T	.97	....	....	....	....	5.66
Pleasantville ‖	Coast	....	....	....	....	.11	.40	.42	....	....	....	....	....	....	.03	....	....	.18	2.18	....	.02	T.	....	....	T.	....	....	1 15	.44	....	....	....	4.93
Port Norris	Maurice	....	....	....	....	.24	1.39	....	....	....	....	....	....	.05	....	....	.84	2.00	....	....	....	....	....	....	....	....	....	1.11	....	....	....	....	5.63
Runyon	Coast	....	....	....	....	.19	1.50	....	....	....	....	....	....	....	....	....	....	.43	2.00	.18	.12	....	....	....	.06	....	....	.80	....	....	....	....	5.28
Trenton***	Delaware	T.	....	....	T.	.34	1.54	....	....	....	....	....	T.	.01	....	....	.21	1.15	.87	.01	.01	....	....	.04	....	....	T.	.51	....	....	....	....	4.69
Trenton No. 2 ‖	....do	....	T.	....	....	.34	.41	1.46	....	....	....	....	....	....	T.	....	....	.74	2.27	.01	.02	....	....	....	.04	....	T.	.57	T.	....	....	....	5.86
Tuckerton	Coast	....	....	....	....	....	.54	....	....	....	....	....	....	....	....	....	.08	.70	2.54	.02	.04	....	....	.02	....	....	....	1.62	....	....	....	....	5.56
Phila., Pa***	Delaware	....	....	....	.03	.53	.73	....	....	....	....	....	....	.01	....	....	.09	1.87	.46	T.	T.	....	....	.04	....	....	T.	.54	....	....	....	....	4.30
The Sea Coast.																																	
Asbury Park	Coast	....	....	....	....	.05	.46	....	....	....	....	....	....	T.	....	....	.02	.65	1.02	.10	.08	....	....	.01	.04	....	T.	1.10	....	....	....	....	3.53
Atlantic City***	....do	T.	....	....	....	.21	.63	....	....	....	....	....	....	.02	....	....	.22	1.92	.01	.03	.06	....	....	T.	....	....	....	1.53	....	....	....	....	4.63
Long Branch**	....do	T.	....	....	....	.30	.33	....	....	....	....	.02	....	....	....	....	.33	1.63	1.30	.13	T.	....	....	.12	....	....	.03	.93	....	....	....	....	5.12
Sandy Hook***	....do	T.	....	....	....	.05	.50	....	....	....	....	T.	....	....	....	....	.03	1.09	1.47	.04	.01	....	....	.03	....	....	T.	.82	.01	....	....	....	4.05

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.06	30.44	31	29.61	6	17.0	49	e.	17	80	66	75	53
amden	......	30.43	31	29.59	6	9.4	30	e.	18	......	......	......	......
ong Branch	30.04	30.48	31	29.53	6	......	......	......	......	79	62	69	......
ew York, N. Y	30.03	30.44	31	29.55	6	15.3	50	nw.	12	76	61	69	53
hiladelphia, Pa	30.06	30.46	31	29.57	6	13.1	38	s.	6	77	56	66	49
idgefield	30.03	30.45	31	29.55	6	......	......	......	......	......	......	......	......
andy Hook	30.03	30.42	31	29.52	6	15.2	41	nw.	12	78	66	76	50
renton	30.04	30.44	31	29.53	6	11.4	37	w.	12	80	56	72	55

Daily Temperatures for October, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	77	80	83	77	74	71	63	76	80	80	66	56	55	54	69	60	63	65	63	65	62	66	57	55	56	69	68	56	62	58	59	66.0
	Minimum	44	48	47	55	66	48	40	42	42	46	52	39	31	29	32	48	56	59	38	53	47	41	39	42	47	48	52	36	33	39	30	44.2
Charlotteburg	Maximum	75	78	80	75	73	72	58	73	80	75	72	55	51	60	64	62	65	62	61	63	62	63	63	52	52	64	65	56	58	60	58	64.7
	Minimum	50	45	41	48	63	47	39	47	39	41	46	39	33	22	26	30	54	57	55	50	44	43	36	40	42	48	50	34	32	40	29	42.3
Dover	Maximum	71	76	77	72	73	70	59	71	75	73	63	54	50	57	61	66	60	63	59	62	58	63	54	49	53	68	66	55	58	53	51	62.6
	Minimum	48	50	45	56	65	45	40	40	43	45	45	40	33	28	30	45	58	58	55	52	45	43	40	42	46	50	40	37	33	39	31	44.1
Layton	Maximum	76	79	81	75	73	71	60	75	79	76	61	54	52	59	64	55	64	62	62	64	58	62	54	49	53	65	67	55	60	53	55	63.6
	Minimum	40	52	43	56	66	47	39	34	37	42	45	34	28	25	27	42	53	58	57	52	46	38	36	40	43	49	39	33	27	40	26	41.7
Long Valley	Maximum	75	77	76	74	75	70	58	72	77	74	65	53	50	57	65	66	64	66	63	63	60	64	58	53	54	69	68	57	57	54	51	64.0
	Minimum	40	45	43	52	65	47	40	40	40	43	48	39	34	26	28	46	56	58	51	52	46	43	37	43	44	49	51	37	35	32	41	43.6
Newton	Maximum	73	78	80	77	78	71	59	75	79	78	52	51	53	60	64	61	64	62	65	63	59	64	62	50	53	55	67	54	58	55	56	63.7
	Minimum	45	50	50	55	63	42	38	41	43	48	45	37	31	26	32	45	54	55	53	48	42	39	42	38	42	40	44	38	36	39	30	42.9
Phillipsburg	Maximum	73	80	80	73	75	72	60	73	76	75	62	56	51	59	65	61	63	67	63	65	59	64	53	54	56	71	68	57	60	55	54	64.5
	Minimum	44	48	48	54	67	43	41	41	43	47	48	42	36	32	33	48	57	60	56	54	49	43	40	45	50	53	52	42	35	42	32	46.0
Sussex	Maximum	77	79	82	79	77	71	60	77	80	78	62	56	52	61	69	58	....	....	63	64	61	65	60	50	53	67	67	54	60	55	60	65.4[b]
	Minimum	46	52	47	55	66	48	41	40	45	46	50	40	33	28	31	46	....	....	54	52	47	39	40	41	46	50	50	38	33	41	30	44.0[b]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	73	85	80	78	82	73	69	74	78	75	65	60	53	61	65	68	65	65	62	65	63	66	57	52	56	71	64	58	61	56	55	66.3
	Minimum	44	49	45	51	61	68	43	41	40	44	48	41	33	26	29	37	50	58	58	53	47	47	37	42	43	47	54	40	31	41	27	44.4
Canoe Brook§§	Maximum	75	85	86	82	83	75	69	80	85	82	70	63	56	64	70	69	63	64	62	64	59	65	58	53	59	71	64	58	61	55	58	68.0
	Minimum	43	52	45	50	61	68	39	37	39	43	47	37	29	24	27	37	48	59	58	53	47	43	34	43	45	47	54	31	30	41	24	43.1
Elizabeth	Maximum	78	82	82	79	76	73	62	78	81	79	67	62	55	62	77	71	64	65	63	61	60	68	59	54	57	71	69	58	62	57	51	67.2
	Minimum	46	54	50	56	66	51	41	43	45	57	55	40	37	31	34	45	59	60	57	54	48	42	41	45	49	54	54	40	35	43	32	47.2
Flemington	Maximum	78	82	83	78	79	74	64	79	81	79	72	58	53	66	66	68	63	67	66	69	65	69	60	54	55	76	71	76	63	60	60	68.8
	Minimum	46	52	47	54	66	50	42	45	44	46	51	39	35	30	32	45	57	60	58	54	48	44	42	46	46	52	55	40	33	42	30	46.2
Jersey City	Maximum	74	78	77	74	73	70	60	73	77	76	65	58	54	60	65	70	64	66	63	62	60	66	58	56	56	67	68	56	62	55	54	65.1
	Minimum	50	57	59	62	65	47	43	48	52	55	48	42	39	40	43	53	59	59	56	52	48	46	49	46	50	55	55	44	42	44	39	49.9
Lambertville	Maximum	74	80	81	76	78	71	59	73	78	76	63	57	52	59	66	68	62	66	60	64	58	64	56	56	56	73	67	55	55	56	57	65.0
	Minimum	46	53	52	57	67	47	41	45	49	49	45	39	36	32	33	40	57	58	56	52	46	43	44	45	45	49	52	40	40	38	31	46.0
Little Falls§§	Maximum	76	82	81	79	75	70	69	77	82	80	67	63	55	64	68	68	65	65	62	67	62	68	58	54	58	71	67	58	63	60	58	67.5
	Minimum	49	52	49	53	61	67	43	42	43	46	50	42	32	28	31	41	51	58	58	53	48	47	38	43	45	48	55	38	35	43	29	45.7
New Brunswick	Maximum	75	78	81	78	78	73	60	74	76	77	68	59	53	59	66	72	63	65	63	63	61	64	60	55	55	75	69	58	62	58	53	66.2
	Minimum	45	54	52	56	66	51	43	44	45	49	52	39	34	30	32	45	58	59	57	53	48	45	42	46	48	53	53	42	34	42	32	46.7
Paterson	Maximum	74	79	79	76	79	70	62	78	78	69	65	58	55	60	62	67	65	64	63	62	60	65	61	55	57	67	62	53	60	58	53	65.0
	Minimum	49	56	52	58	66	51	43	45	48	50	53	44	37	32	36	45	58	59	57	54	48	46	45	43	47	52	56	43	38	44	35	48.1
Plainfield	Maximum	76	80	82	77	78	70	61	75	78	77	66	60	54	61	66	71	63	65	61	63	60	66	55	56	56	73	64	56	62	55	56	65.9
	Minimum	46	52	49	54	65	45	41	44	43	46	49	39	35	30	30	45	57	59	58	52	47	42	39	43	47	52	55	39	34	42	30	45.5
Ridgefield	Maximum	76	80	80	79	74	72	62	76	79	77	67	59	54	62	63	71	63	65	60	62	58	67	56	52	55	66	60	55	62	58	53	65.3
	Minimum	48	57	56	57	68	48	43	45	48	56	53	40	35	31	33	44	58	59	54	53	46	46	43	43	51	53	42	40	38	37	34	47.1
Somerville	Maximum	77	84	83	80	81	73	63	77	80	77	66	61	55	63	67	71	63	67	63	64	63	67	55	56	57	75	68	59	63	59	56	67.5
	Minimum	45	50	47	49	67	47	41	42	41	45	48	39	31	29	29	44	58	61	58	54	48	44	40	46	47	52	46	40	33	38	29	44.8
New York, N. Y	Maximum	72	76	75	71	71	70	60	72	76	76	65	57	53	60	64	69	66	67	64	61	59	66	59	57	56	66	67	56	62	55	54	64.6
	Minimum	50	59	61	62	66	48	43	49	55	57	47	43	39	41	45	55	60	59	55	52	49	48	51	48	50	55	49	45	42	44	41	50.6
The Southern Interior.																																	
Belleplain	Maximum	75	78	81	80	79	75	61	72	75	79	69	60	54	63	66	71	65	74	66	65	62	66	63	64	....	75	70	58	64	58	60	68.2[a]
	Minimum	40	58	56	58	68	49	41	39	38	40	50	35	37	32	30	45	59	62	56	53	50	37	37	51	....	49	54	40	30	36	25	45.2[a]
Bridgeton	Maximum	70	80	81	89	77	75	63	73	74	74	66	66	53	51	61	64	64	69	66	69	68	62	62	58	58	68	66	55	58	55	52	66.0
	Minimum	47	54	57	57	65	50	43	42	44	46	50	39	39	35	34	50	57	61	57	53	50	39	42	49	48	52	53	43	33	43	30	47.2
Burlington	Maximum	81	83	85	80	80	79	61	79	76	80	77	68	60	62	69	69	73	70	70	70	70	70	64	58	64	78	74	66	66	57	65	71.1
	Minimum	56	55	57	57	68	53	44	42	55	43	53	41	40	35	32	53	46	61	59	54	51	43	54	41	48	52	56	44	33	32	33	48.1
Camden	Maximum	78	82	84	79	80	72	61	74	79	78	68	60	53	61	68	72	65	68	63	66	60	66	60	56	60	78	66	48	64	56	58	67.5
	Minimum	48	57	56	57	69	48	45	43	44	46	45	44	41	37	34	49	59	60	57	55	50	45	43	48	48	52	51	45	36	44	32	48.0
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	75	80	81	77	79	74	69	72	75	77	67	57	53	59	66	68	71	61	62	60	59	67	55	54	56	76	69	55	61	55	54	65.9
	Minimum	46	57	55	60	66	49	41	45	47	50	52	49	35	31	34	48	59	59	57	52	47	43	42	43	42	52	52	42	37	40	31	47.2
Hammonton	Maximum	78	81	84	83	81	72	62	75	80	80	70	61	56	62	70	72	65	76	67	64	65	66	66	63	62	78	70	60	63	54	59	69.2
	Minimum	42	54	52	52	65	47	37	39	41	43	50	37	32	30	28	45	55	58	57	51	47	36	37	44	42	49	47	36	31	33	26	43.3
Hightstown	Maximum	75	79	83	83	81	73	60	74	79	81	69	58	54	61	70	72	69	67	63	63	60	65	66	63	58	77	68	58	63	58	57	68.0
	Minimum	44	56	57	58	66	51	41	42	47	47	52	38	33	30	30	46	58	59	56	52	48	42	40	47	45	50	54	40	42	41	29	46.5
Indian Mills	Maximum	78	83	84	80	79	78	60	74	81	80	60	62	54	63	70	72	64	70	66	63	60	66	63	60	60	77	71	58	64	58	60	68.5
	Minimum	42	55	54	57	68	52	40	40	40	44	5	37	34	30	30	49	58	61	50	53	50	37	39	47	45	52	55	39	30	41	28	45.5
Lakewood	Maximum	72	77	77	75	77	74	59	70	74	70	67	58	53	57	63	70	64	67	65	60	60	63	59	55	58	72	69	55	62	55	54	64.9
	Minimum	46	57	53	53	67	52	42	43	44	43	50	39	34	31	30	48	58	60	58	54	53	42	38	46	50	53	53	43	32	39	30	46.5
Moorestown	Maximum	75	80	81	77	78	70	61	73	77	77	67	60	52	60	68	71	64	68	61	66	60	65	59	57	60	75	63	57	62	54	58	66.3
	Minimum	46	55	53	57	67	46	43	42	43	45	43	41	38	32	32	46	57	60	54	54	47	42	41	45	45	50	48	39	33	35	31	45.5
Pemberton	Maximum	74	78	82	79	78	73	60	70	76	76	68	58	54	60	66	71	65	70	65	62	60	64	60	57	59	75	69	57	62	58	56	66.5
	Minimum	47	56	55	58	68	53	44	43	43	47	55	40	39	33	32	49	59	62	58	54	50	43	41	48	45	52	57	43	33	43	29	47.7
Pleasantville§§	Maximum	75	75	77	76	75	76	71	73	75	74	70	65	55	61	65	71	68	72	68	64	62	66	63	63	63	67	63	58	62	56	61	67.4
	Minimum	43	57	65	55	69	69	40	41	40	41	55	36	36	34	30	48	59	61	60	54	50	39	40	50	54	56	55	40	31	40	26	47.5
Runyon	Maximum	76	79	82	78	80	74	72	64	79	78	72	61	58	62	67	74	67	67	64	62	66	64	65	55	67	76	70	64	59	58	58	68.6
	Minimum	43	46	44	43	46	48	35	38	37	36	45	34	26	23	23	38	46	59	58	52	46	42	31	42	47	46	53	36	29	26	24	40.2
Trenton	Maximum	74	78	81	76	77	73	59	73	76	76	64	58	52	59	66	70	64	66	61	63	60	64	57	55	59	74	69	56	62	53	57	65.5
	Minimum	48	57	57	57	68	45	43	48	49	52	45	42	39	36	38	49	58	60	54	53	49	45	49	48	50	53	47	44	39	40	37	48.4
Tuckerton	Maximum	76	78	76	75	77	75	67	76	76	76	70	70	67	60	65	69	70	70	69	67	60	70	60	60	63	71	68	60	60	57	57	68.2
	Minimum	58	55	50	51	60	51	47	52	49	57	40	46	43	41	46	55	55	60	58	56	53	44	54	52	53	55	52	43	44	46	29	50.2
Philadelphia, Pa	Maximum	75	78	81	77	78	74	61	73	76	76	66	59	52	60	68	69	65	69	63	67	61	67	60	58	62	75	68	58	64	56	57	66.9
	Minimum	52	59	60	62	70	49	47	53	55	57	47	46	43	41	47	55	60	62	58	56	52	47	53	52	53	55	53	48	44	45	41	52.3
The Sea Coast.																																	
Asbury Park	Maximum	75	74	71	70	70	70	60	70	72	70	67	58	53	60	62	66	65	64	61	60	59	65	58	56	57	64	65	57	59	57	54	63.5
	Minimum	50	60	61	64	67	50	44	48	52	54	54	42	38	39	40	57	63	61	57	54	47	55	48	52	53	57	53	45	40	43	37	50.8
Atlantic City	Maximum	74	70	73	73	73	74	62	71	71	71	70	60	55	59	65	68	64	68	62	64	62	69	63	60	60	67	68	57	61	58	55	65.4
	Minimum	55	64	66	66	68	48	44	49	56	56	45	42	43	40	46	60	62	62	57	55	49	44	49	57	56	60	49	45	42	41	39	52.1
Long Branch	Maximum	72	80	74	72	73	71	60	72	75	73	67	60	55	60	62	67	63	62	59	58	60	67	60	55	56	70	66	56	62	56	54	64.4
	Minimum	48	59	58	60	65	48	44	45	48	50	46	52	39	34	35	57	58	58	54	51	49	43	42	49	50	54	45	40	32	40	34	47.4
Sandy Hook	Maximum	72	76	73	72	71	71	61	71	72	71	66	58	52	58	60	66	64	63	61	60	59	68	58	55	57	66	67	56	61	55	54	63.5
	Minimum	53	60	61	64	68	51	47	53	57	58	50	46	44	45	47	54	58	60	56	54	51	48	51	50	51	57	50	48	44	46	43	52.4

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.061	.160	.176	.158	.080	.116	.112	.080	*	.144	.176	.128	.046	.112	.080	.020	.468	.064	.004	.064	.192	.064	.096	.096	.048	.030	*	.088	.192	.096	.050	3.204
	Wind movement	61	12	94	43	136	127	101	59	24	20	35	81	59	44	26	41	40	140	70	97	46	109	28	69	100	72	83	57	57	100	55	2086
Runyon	Evaporation	.120	.120	.150	.120	.040	.110	.120	.120	.105	.105	.120	.120	.120	.110	.080	.040	.010	.080	.000	.030	.120	.120	*	.060	.030	.030	.050	.090	.090	.090	.090	2.590
	Wind movement	27	26	55	36	28	46	42	39	80	59	27	55	54	17	13	40	6	8	48	35	50	48	14	40	68	46	29	95	47	44	15	1319

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. NOVEMBER, 1932. No. 11.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The outstanding feature of the weather for the month was its wetness. The average for the State was the second greatest on record for November, being exceeded only by that of November, 1889. This feature contrasts strongly with last November which was the second driest November of record. Over the State as a whole the average amount was 238% of the normal, ranging from 196% along the Sea Coast region to 289% in the Red Sandstone Plain district. Heavy rains of from one to two inches fell during the 1st, followed by another period of heavy amounts of from three to five inches from the 7th to 10th, inclusive. On the 17th, there were moderate amounts, followed by heavy rains of from one to three inches on the 19th. On the 26th light to moderate amounts were recorded. Water supplies were greatly replenished in streams and well and in the soil. Snow occurred at about one-half of the stations, but was of inappreciable amounts, usually only a few flakes, and constituted the first snow of the season. It occurred on varying dates.

The temperature averaged close to the normal. The highest recorded were mostly in the sixties and were observed on various dates. A rather sudden cold wave on the 27th brought the lowest temperatures. These ranged mostly between 5 and 15 degrees above zero, except along the sea coast where the readings were not quite so low. The ground became quite generally frozen for the first time this season.

High winds on the 1st did a rather miscellaneous damage in the Southern Interior, while gales during the night of the 9-10th along the Jersey coast caused pounding waves that did a total estimated damage of from $300,000 to $400,000.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 42.0°, which was 0.7° below normal. The highest temperature was 71° at Hammonton on the 16th, and the lowest, 3°, at Layton on the 29th. The greatest daily range of temperature was 45° at Runyon and Tuckerton on the 4th and 26th respectively. The highest monthly mean temperature was 46.4° at Atlantic City, and the lowest, 37.5° at Layton.

The temperature departure from the normal for the year, 1932, to date, by sections, is: The Highlands, +2.0°; Red Sandstone Plain, +1.7°; Southern Interior, +1.8°; Sea Coast, +1.9°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 7.81 inches, which was 4.53 inches above normal. The average total snowfall at 20 selected stations was a trace. The greatest monthly precipitation was 12.66 inches, at Little Falls, and the least, 3.92 inches at Atlantic City. The greatest amount of precipitation in any 24 consecutive hours was 3.73 inches at Chatham on the 20th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 9, or 1 more than normal.

The precipitation accumulated departure from the normal for the year 1932, to date, by sections, is: The Highlands. +1.94 inches; Red Sandstone Plain, −0.54 inch; Southern Interior, +3.36 inches; Sea Coast, −2.91 inches.

WIND.

The prevailing wind direction was from the Northwest. The wind movement averaged 14 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 60 miles per hour from the East at Atlantic City on the 9th.

MISCELLANEOUS.

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The per cent of possible sunshine was 51, or 7 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.20 inches, or 0.10 inch above normal. The highest reading was 30.85 inches at Trenton on the 28th, and the lowest 29.31 inches at Long Branch on the 19th.

The mean stage of the Delaware River at Phillipsburg was 7.0 feet, and the highest 12.0 feet on the 20th. The mean stage at Trenton was 4.0 feet, and the highest 7.0 feet on the 21st.

Dense fog occurred on the following dates: 5, 7, 16, 17, 24 and 25. Sleet occurred on the 13th at Dover. Killing frost has occurred throughout the entire State, it occurring in the Sea Coast section on the 14th.

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	44.8	76	18	4.53	7.90	2.72	......	......	......	......	......
1886	44.5	73	17	4.49	6.24	3.45	......	......	......	......	......
1887	41.5	72	13	1.94	2.60	0.95	......	......	......	......	6
1888	45.8	77	8	3.97	5.41	2.66	......	......	......	13	10
1889	45.7	69	13	**8.48**	11.45	4.70	......	......	......	13	13
1890	43.8	74	11	0.82	1.10	0.38	......	13	12	5	8
1891	42.2	70	6	2.39	3.47	1.54	......	12	10	8	4
1892	41.9	71	12	7.29	9.49	4.74	......	8	9	13	11
1893	41.8	70	11	3.48	4.53	2.19	......	10	11	9	7
1894	40.3	76	11	3.34	5.12	1.77		13	7	10	10
1895	45.7	80	12	3.17	5.10	1.56	0	12	7	11	10
1896	48.2	78	12	3.05	5.68	1.37	3.2	9	9	12	8
1897	43.8	74	10	4.59	5.95	2.42	1.3	8	11	11	12
1898	42.4	70	11	6.76	9.07	3.83	**14.7**	10	9	11	14
1899	44.0	71	17	2.29	4.32	0.72	1.1	15	8	7	7
1900	47.5	79	15	3.43	5.54	1.82	T.	9	10	11	9
1901	**38.5**	69	10	2.38	4.23	1.18	0.8	12	9	9	6
1902	49.3	80	20	2.20	4.17	0.87	0.2	10	11	9	8
1903	39.9	79	3	1.26	2.03	0.75	T.	16	8	6	6
1904	40.2	69	6	2.18	3.40	1.30	1.6	12	10	8	6
1905	42.1	70	6	1.84	2.86	0.54	0.1	12	10	8	6
1906	43.6	70	8	1.61	2.52	1.06	2.3	16	7	7	6
1907	43.5	*68*	13	5.65	6.95	4.19	0.8	10	8	12	13
1908	43.1	72	2	0.96	1.29	0.35	2.2	14	8	8	4
1909	46.4	80	12	2.36	4.33	1.32	2.1	13	8	9	8
1910	40.4	71	13	3.79	5.73	1.63	1.4	5	13	12	9
1911	41.3	73	13	5.17	6.50	3.17	1.7	8	11	11	10
1912	45.3	76	11	3.43	8.12	2.02	1.3	15	8	7	6
1913	46.2	77	21	2.71	4.89	1.00	T.	14	7	9	7
1914	43.3	80	6	2.60	4.81	1.21	0.7	16	8	6	6
1915	44.0	75	17	1.69	3.11	0.96	0	14	8	8	8
1916	43.3	75	12	2.11	3.81	0.80	T.	16	5	9	8
1917	39.8	*68*	9	**0.56**	1.15	**0.18**	0.7	19	5	6	3
1918	43.9	71	12	1.87	3.05	0.49	0	14	6	10	7
1919	43.7	76	13	3.74	6.18	1.98	T.	13	7	10	11
1920	43.0	74	12	4.41	7.90	2.14	0.2	9	6	15	10
1921	44.3	79	18	4.26	6.69	2.79	0.1	9	6	15	14
1922	44.3	73	13	0.91	1.56	0.49	0.2	13	8	9	6
1923	43.1	72	11	2.51	4.09	1.10	0	11	8	11	7
1924	42.9	77	**1**	2.03	3.23	1.17	1.3	14	8	8	5
1925	42.0	76	10	3.40	5.10	2.48	0.7	14	8	8	9
1926	42.5	76	8	4.04	7.19	2.44	T.	13	8	9	9
1927	47.9	78	15	4.02	8.68	1.74	0.1	10	8	12	11
1928	45.1	78	13	1.90	2.76	1.20	0.3	10	9	11	9
1929	44.5	**83**	4	2.73	3.64	2.08	0.4	10	7	13	10
1930	44.1	73	2	3.70	6.54	1.41	0.2	12	6	12	9
1931	**50.3**	80	14	0.82	1.19	0.42	1.6	12	7	11	6
1932	42.0	71	3	7.81	**12.66**	3.92	T.	14	6	10	9
Normal	42.7	......	......	3.28	......	......	1.1	12	8	10	8
Extremes	......	83	1	......	12.66	0.18	......	......	......	......	......

W. B. O. Philadelphia-12-26-32-830.

Climatological Data for November, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	40.4	−0.7	60	1†	11	27	33	7.21	+3.97	2.00	T.	7	15	7	8	.....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	38.3^{c}	−1.8	60	5†	7	27	35	10.41	+6.89	2.94	0	8	19	3	8	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	.....	.....	.....	.....	6	27	....	7.59	+4.79	2.37	T.	7	12	9	9	nw.	Brice E. Riker.
Dover	Morris	600	48	39.0^{a}	−1.1	61	19	8	27	35	9.40	+5.76	2.50	T.	12	10	12	8	......	William C. Harris
Layton	Sussex	480	31	37.5	−1.3	60	1	3	29	39	7.53	+5.04	2.51	T.	7	14	3	13	n.	A. M. Depue.
Long Valley	Morris	520	1	39.5	....	61	19	9	27	33	9.26	....	2.62	T.	8	17	3	10	nw.	S. N .Dilts.
Newton	Sussex	769	48	38.8	−1.7	64	30	5	27	44	6.89	+3.76	2.54	T.	7	11	3	16	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	39.8	−1.4	61	19	12	27	30	7.76	+4.56	1.97	T.	8	10	9	11	......	Town Engineer.
Sussex	Sussex	442	37	37.8	−3.3	59	11	9	27†	35	6.05	+2.80	1.98	0	8	15	5	10	......	A. J. W. Mowatt
Means and extremes		......	....	38.9	−1.6	64	30	3	29	44	8.01	+4.70	2.94	T.	8	14	6	10	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	39.2	−2.2	69	19	14	28	43	10.01	+6.44	2.69	......	10	15	1	14	ne.	John Kline.
Canoe Brook	Essex	173	2	39.6	....	61	5†	9	29	36	11.36	....	2.68	......	11	16	3	11	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	.....	......	.....	.....	......	......	....	12.20	+9.30	3.73	......	11	17	3	10	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	42.6	−0.9	67	6	13	27	33	7.64	+4.39	2.05	T.	8	19	4	7	ne.	Union County Park Comm.
Flemington	Hunterdon	140	§46	42.4	−0.5	63	1†	11	27	36	9.91	+6.79	3.34	0	9	15	6	9	n.	Hiram E. Deats.
Jersey City	Hudson	10	34	43.6	−0.4	61	5†	12	27	32	6.88	+3.69	2.00	0	9	12	8	10	n.	S. K. Pearson.
Lambertville	Hunterdon	430	45	41.6	−1.6	62	19	10	27	29	8.55	+5.34	2.27	T.	9	15	6	9	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	41.7	−0.5	63	5	11	27	34	12.66	+9.76	3.40	0	10	17	6	7	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	42.6	−0.8	64	19	12	27	31	7.39	+3.91	2.47	0	8	13	9	8	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	.....	......	.....	.....	......	......	....	8.86	....	2.32	......	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	42.4	−1.1	62	19	12	27	29	9.59	+6.42	3.70	0	10	11	7	12	nw.	Philip Del Vecchio.
Plainfield	Union	120	44	41.1	−1.4	63	11	11	27	35	9.38	+6.01	2.61	T.	8	12	8	10	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	40.5	......	61	5	12	27	31	8.25	... .	2.58	0	10	12	9	9	nw.	George P. Kirsten.
Somerville, (near)	Somerset	70	49	41.3	−1.1	64	5†	11	27	35	8.31	+5.27	2.40	0	8	14	3	13	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	14	.....	......	.....	.....	......	......	....	9.48	....	3.35	......	9	....	....	....	......	Hackensack Water Co.
New York, N. Y.		365	62	43.7	−0.5	61	1	12	27	36	5.87	+2.91	1.94	0	10	11	8	11	n.	U. S. Weather Bureau.
Means and extremes		......	....	41.6	−1.1	69	19	9	29	43	9.36	+6.12	3.73	T.	9	14	6	10	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	44.0	−0.5	67	1†	12	27†	43	4.81	+2.20	1.97	0	6	9	3	18	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	49	43.6	−2.0	65	5†	14	27	32	5.35	+2.55	1.56	0	7	18	4	8	nw.	Bennett K. Matlack
Burlington	Burlington	12	§46	45.0	+0.6	68	16	12	27	41	7.18	+4.07	2.03	T.	8	15	9	6	ne.	Public Service Power Co.
Camden	Camden	20	....	43.4	....	69	5	13	27	35	6.61	....	1.90	T.	12	11	11	8	nw.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	.....	....	.....	.....	......	......	....	......	....	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	43.1	....	65	19	12	27	33	7.72	+3.70	2.00	0	7	14	7	9	n.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	42.8	....	71	16	10	27	42	7.18	+3.86	2.23	T.	9	17	8	5	nw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	38	43.0	−0.3	64	11†	12	27	35	6.96	+3.65	2.71	0	8	15	7	8	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	43	43.5	+0.6	70	16	13	27	41	8.26	+5.18	2.18	0	8	13	8	9	n.	James M. Armstrong.
Lakewood	Ocean	54	28	43.0	+0.2	66	5	14	27	35	6.20	+3.74	1.95	0	8	15	2	13	nw.	R. W. Holman.
Moorestown	Burlington	......	69	42.0	+1.2	66	16	12	27	34	8.15	+4.90	3.38	T.	11	12	12	6	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	.....	....	.....	.....	......	......	....	5.13	+2.75	1.67	0	7	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	44.0	....	68	16	13	27	34	6.75	....	1.93	T.	7	15	3	12	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	44.1	....	68	5	13	27	39	5.57	+2.85	2.41	......	10	22	4	4	nw.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	.....	....	.....	.....	......	......	....	6.45	....	2.05	0	6	17	6	7	ne.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	41.6	....	64	19	10	29	45	8.83	....	2.88	......	8	18	7	5	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	43.0	−1.4	66	16	12	27	33	7.53	+4.80	2.19	T.	11	12	8	10	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	.....	....	.....	.....	......	......	....	8.46	....	2.63	T.	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	45.5	+1.4	66	1	10	26	45	4.96	+1.88	1.55	0	9	10	9	11	ne.	John H. Brown.
Philadelphia, Pa.		117	61	45.8	+0.1	67	16	16	27	33	7.45	+4.75	2.31	T.	11	11	9	10	n.	U. S. Weather Bureau.
Means and extremes		......	....	43.4	+0.3	71	16	10	26†	45	6.78	+3.55	3.38	T.	8	14	7	9	uw	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	44.8	0.0	66	5	18	27	29	6.77	+3.85	2.10	0	9	22	3	5	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	46.4	+0.8	66	1	17	27	35	3.92	+1.10	1.78	0	8	10	6	14	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	42.2	−2.0	63	15†	16	27	30	8.22	+4.70	1.95	0	11	11	8	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	44.3	−0.3	61	19	17	27	29	5.58	+2.33	1.44	T.	11	12	5	13	ne.	U. S. Weather Bureau.
Means and extremes		......	....	44.4	−0.4	66	1†	16	27	35	6.12	+3.00	2.10	T.	10	14	5	11	nw.	
For the State		......	....	42.0	−0.7	71	16	3	29	45	7.81	+4.53	3.73	T.	9	14	6	10	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for November, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	1.70					.06	1.20		.06	2.00			T.				.35		1.84			T.										7.21
Charlotteburg	Passaic	2.81						1.46	.03	.16	2.34							.40		2.94							.27						10.41
Culvers Lake	Delaware	2.37	T.			T.	T.	.93		.08	1.57							.34		2.23							.07						7.59
Dover	Passaic	2.40					*	1.56	.05	.43	1.75			T.			.02	.39	*	2.50			T.			*	.30						9.40
Layton	Delaware	2.35					.12	.58		.13	1.45			T.				.39		2.51													7.53
Long Valley	Morris	2.62						1.55	.15	.07	1.55							.41		2.55			T.				.36						9.26
Newton	Delaware	1.58				T.	.03	1.08	.18		1.30									2.54			T.		T.		.18						6.89
Phillipsburg	do	1.97				T.	.33	1.12	T.	.19	1.60						T.	.35	T.	1.89			T.		T.	T.	.31						7.76
Sussex	Hudson	1.15	.03					.75	.04	.07	.78							1.25		1.98													6.05
The Red Sandstone Plain.																																	
Boonton‖	Passaic	.56	1.67					1.14	.37	.02	2.40	.02	T.					.40		.74	2.69				T.								10.01
Canoe Brook‖	Essex	1.25	.85				.01	2.46	.11	.09	2.68							.32		1.84	1.45						.30						11.36
Chatham ‖	do	.72	1.28			T.		1.38	.94	.27	1.72	.51						.29		1.02	2.71						.36						12.20
Elizabeth	Coast	1.28					T.	1.98	.02	.46	1.56		T.	T.			T.	.07		2.05					T.		.22						7.64
Flemington	Raritan	1.66					T.	3.34	.05	.02	1.85		.06				T.	.29		2.33					T.		.31						9.91
Jersey City	Coast	1.00				T.	.02	1.50	T.	.40	2.00	T.	T.				.01	.05		1.70			T.		T.		.20						6.88
Lambertville	Delaware	1.96						1.41	.06	.16	2.27							.36		2.05			T.		.02		.26						8.55
Little Falls.‖	Passaic	1.25	1.65					1.53	.14	.04	3.40							.31		1.95	2.08						.31						12.66
New Brunswick	Raritan	1.22					T.	1.22	.05	.25	1.84							.11		2.47					T.		.23						7.39
New Milford‖	Hackensack	.34	1.48					1.16	.59	.02	1.76							.18		.75	2.32						.26						8.86
Paterson	Passaic	1.75						1.55	.02	.15	1.68						T.	.22	.02	3.70					.05		.45						9.59
Plainfield	Raritan	1.54					.01	2.04	T.	.72	2.03			T.			T.	.14		2.61							.29						9.38
Ridgefield**	Hackensack	1.27					T.	2.40	.07	.43	1.24		.02				.04	.07	T.	2.58							.13						8.25
Somerville	Raritan	1.99						1.88	.02	.15	1.38							.18		2.40							.31						8.31
Woodcliff Lake‖	Hackensack	.36	1.12					1.45	.29		1.63							.31		.76	3.35						.21						9.48
New York, N. Y***	Coast	.76				T.	.13	1.25	T.	.84	1.13	T.	T.				.01	.05	.03	1.49					T.	T.	.18						5.87
The Southern Interior.																																	
Belleplain	Tuckahoe						T.	.45	.01	.34	1.97									1.90							.14						4.81
Bridgeton	Delaware	1.06						1.15		.08	1.56							.11		1.13							.26						5.35
Burlington	Delaware	1.98					T.	1.46	T.	.07	2.03						.06	.10		1.06			T.				.42						7.18
Camden***	do	1.41					.14	.85	.01	1.00	1.00		.01				T.	.15	.03	1.65			T.			.03	.33						6.61
Clayton	do																																
Freehold	Raritan	1.43						1.16	.07	.84	1.89						T.			2.00							.33						7.72
Hammonton	Mullica	1.31					.05	.96	.04	.31	2.23						.03			1.98			T.				.27						7.18
Hightstown	Raritan	1.22						.38	.03	1.02	1.06							.16		2.71							.38						6.96
Indian Mills	Mullica	1.30					T.	2.18	.06	.20	2.00							.10		2.05							.37						8.26
Lakewood	Metedeconk	1.00					.03		.07	1.00	1.70						T.	.10		1.95							.35						6.20
Moorestown‖	Delaware	1.42		T.			1.24	.19	.04	3.38	.01	T					.09		.74	.67			T.			.36	.01						8.15
Northfield	Coast	.95						.37	T.	.82	1.67						.03			1.22							.07						5.13
Pemberton	Delaware	1.36					T.	1.19		.23	1.54							.14		1.93				T.			.36			T.			6.75
Pleasantville‖	Coast	.22	.83					.37	.07	.27	2.41						T.	.10		.43	.78						.09						5.57
Port Norris	Maurice							2.05		2.00	.50							.07		1.70							.13						6.45
Runyon	Coast	1.20						1.50	.26	.44	2.07							.18		2.88							.30						8.83
Trenton***	Delaware	2.19					.07	.83	T.	.68	1.19	T	.01				T.	.11	.04	2.05			T.		T.	.04	.32						7.53
Trenton No. 2‖	do	.55	1.58					.74	.15	.01	2.62		T.					.11		.84	1.49			T.		T.	.37	T.					8.46
Tuckerton	Coast	1.04					.02	.36	.11	.76	1.06						.02	.04		1.55													4.96
Phila., Pa***	Delaware	1.75					.20	.95	T.	1.57	.74	T	T.				.02	.16	.02	1.71			T.			.02	.31						7.45
The Sea Coast.																																	
Asbury Park	Coast	1.09					.01	1.25	.02	2.10	1.89						.04	.05	T.							.32							6.77
Atlantic City***	do	.60					T.	.29	.04	1.27	.57		T				T.	.07	T.	.99							.09						3.92
Long Branch**	do	2.25					.06	1.50	T.	1.30	.80						.01	.04	.08	1.87						.02	.29						8.22
andy Hook***	do	.90					.10	1.34		.63	.70		T.	T.			.17	.05	.06	1.36					T.	.01	.26						5.58

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following neasurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
tlantic City	30.20	30.76	28	29.49	19	17.9	60	e.	9	78	68	72	44
amden		30.82	28	29.42	19	9.3	30	ne.	9				
ong Branch	30.21	30.83	28	29.31	19					75	68	71	
ew York, N. Y	30.19	30.82	28	29.39	19	15.8	56	nw.	1	72	61	64	60
hiladelphia, Pa	30.21	30.84	28	29.47	19	14.2	42	ne.	10	70	59	60	59
idgefield	30.19	30.84	28	29.40	19								
andy Hook	30.18	30.82	28	29.41	19	16.5	56	sw.	1	78	69	72	49
renton	30.20	30.85	25	29.42	19	11.7	42	nw.	1	81	64	69	59

Daily Temperatures for November, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	60	53	52	56	58	55	53	59	53	57	60	54	40	48	55	58	55	44	59	52	45	45	39	50	51	47	29	31	42	56	....	50.5
	Minimum	47	34	33	24	38	35	47	51	41	42	31	33	32	24	27	38	40	27	39	30	25	27	17	26	23	20	11	13	13	23	....	30.4
Charlotteburg	Maximum	57	53	50	53	60	58	52	52	51	51	54	50	43	47	58	54	55	44	60	55	48	45	....	....	....	43	24	35	43	52	....	49.9[c]
	Minimum	39	29	30	18	31	26	44	45	37	38	34	33	29	18	23	24	39	26	36	24	20	26	11	23	19	23	7	12	12	26	....	26.7
Dover	Maximum	58	51	48	51	58	52	55	54	47	53	58	50	44	47	56	56	56	47	61	51	48	41	39	50	54	49	....	35	47	53	....	50.7[a]
	Minimum	43	32	29	21	35	30	47	44	38	37	29	31	27	22	25	26	32	27	37	25	22	23	14	26	21	14	8	13	14	27	....	27.3
Layton	Maximum	60	54	49	53	59	50	53	57	51	55	58	52	42	47	57	53	57	44	50	43	50	36	38	50	49	49	32	37	42	54	....	49.4
	Minimum	44	32	28	17	30	31	44	39	38	40	29	29	28	20	22	22	33	23	38	25	19	22	9	28	17	16	6	5	3	32	....	25.6
Loug Valley	Maximum	60	51	50	53	59	57	56	57	55	56	57	55	40	47	54	55	56	43	61	54	46	44	37	47	51	49	28	34	43	55	....	50.3
	Minimum	51	31	30	20	41	30	42	45	39	43	28	32	31	24	24	25	31	26	37	29	21	25	14	26	21	25	9	14	13	33	....	28.7
Newton	Maximum	59	52	50	53	59	53	50	50	45	58	60	52	42	43	60	56	54	45	59	56	49	38	39	60	61	59	30	33	45	64	....	51.1
	Minimum	41	31	30	24	41	20	43	35	32	32	32	30	28	23	30	31	25	23	36	25	24	22	14	23	26	15	5	18	14	26	....	26.6
Phillipsburg	Maximum	60	53	48	53	59	55	55	58	51	56	57	48	41	49	55	58	57	42	61	42	47	38	39	49	42	47	30	32	31	55	....	48.9
	Minimum	42	36	30	25	37	37	49	50	42	41	32	34	31	26	29	28	33	29	40	29	28	28	19	27	25	20	12	15	16	29	....	30.6
Sussex	Maximum	58	58	52	53	58	53	52	53	52	52	59	53	41	47	58	49	52	43	49	36	45	44	35	42	48	48	27	27	33	45	....	47.4
	Minimum	44	33	29	23	23	28	46	49	39	40	31	35	29	24	27	26	39	26	38	27	24	26	16	27	23	23	9	9	11	19	....	28.1
The Red Sandstone Plain.																																	
Boonton§§	Maximum	63	55	51	54	61	55	56	55	53	55	61	44	45	48	56	55	53	47	69	47	49	36	40	51	53	41	45	36	46	60	....	51.3
	Minimum	31	30	31	21	26	29	36	51	39	39	29	34	28	22	26	28	36	25	29	29	24	29	15	18	23	25	15	14	15	17	....	27.1
Canoe Brook§§	Maximum	59	58	50	56	61	58	54	52	49	56	61	50	44	51	58	56	53	55	61	40	48	38	40	51	55	43	43	36	44	54	....	51.1
	Minimum	39	29	28	20	35	31	43	50	40	40	30	35	30	20	24	25	40	24	38	30	22	25	13	26	20	35	11	11	9	20	....	28.1
Elizabeth	Maximum	58	62	52	58	62	67	55	56	53	56	64	56	45	50	60	57	57	47	61	57	46	43	42	53	55	49	29	35	45	56	....	52.9
	Minimum	46	34	33	26	38	44	51	51	41	46	33	37	32	24	28	32	44	31	43	31	26	25	20	29	25	27	13	20	17	23	....	32.3
Flemington	Maximum	63	61	52	58	63	59	56	59	54	62	63	56	42	53	62	57	56	46	63	57	51	45	43	54	57	49	31	37	50	54	....	53.8
	Minimum	45	32	31	24	37	39	49	53	42	45	31	34	31	24	26	29	41	28	39	30	26	26	17	26	25	28	11	15	17	31	....	31.1
Jersey City	Maximum	60	54	50	56	61	58	55	56	48	56	60	54	47	52	59	58	55	47	61	43	49	38	44	51	57	52	28	36	43	52	....	51.3
	Minimum	46	40	36	37	46	48	52	49	44	46	45	35	34	30	39	45	41	31	45	30	33	27	24	34	35	20	12	19	24	33	....	36.0
Lambertville	Maximum	60	52	51	56	61	57	56	56	50	57	61	54	40	51	59	60	57	42	62	52	48	42	42	50	55	49	31	36	45	53	....	51.4
	Minimum	45	36	32	27	43	44	49	42	40	45	35	33	31	25	30	34	36	28	40	28	27	26	18	32	32	22	10	14	17	32	....	31.8
Little Falls§§	Maximum	60	58	53	57	63	57	55	56	54	56	60	56	47	51	60	57	55	49	62	49	51	39	44	53	55	46	45	36	45	58	....	52.9
	Minimum	42	32	32	24	35	33	48	51	40	40	31	38	33	25	27	30	41	28	35	29	26	28	17	25	24	37	11	15	14	25	....	30.5
New Brunswick	Maximum	61	54	49	57	62	60	54	56	53	57	62	58	42	51	60	60	59	51	64	57	46	44	41	50	55	50	29	35	45	53	....	52.5
	Minimum	44	36	34	26	41	45	50	51	43	51	34	35	32	26	29	32	43	29	39	31	27	26	19	29	25	25	12	16	18	32	....	32.7
Paterson	Maximum	60	54	49	55	62	60	54	55	53	54	57	54	46	48	57	54	56	43	62	58	49	47	38	50	58	50	29	34	44	55	....	51.5
	Minimum	44	37	35	28	45	36	49	52	41	42	34	39	33	29	30	33	42	29	41	30	29	30	20	33	29	25	12	17	19	32	....	33.2
Plainfield	Maximum	60	54	51	57	62	57	55	56	43	56	63	54	49	52	58	56	54	48	62	43	50	39	44	51	57	52	28	35	43	53	....	51.4
	Minimum	44	30	30	24	36	40	50	49	39	44	41	35	31	21	25	29	41	29	46	30	24	26	16	26	22	19	11	15	19	31	....	30.8
Ridgefield	Maximum	60	55	49	55	61	57	55	55	47	52	59	46	47	49	60	59	58	44	60	40	46	35	38	52	54	47	28	34	42	50	....	49.8
	Minimum	44	36	30	25	42	37	51	45	40	41	32	33	31	28	34	33	33	28	42	30	30	24	19	30	27	16	12	17	19	30	....	31.2
Somerville	Maximum	60	56	51	58	64	58	56	58	53	60	64	49	41	52	60	58	54	43	62	51	48	42	45	52	55	49	32	36	48	56	....	52.4
	Minimum	47	32	30	23	37	38	51	53	42	47	30	34	31	23	25	27	40	27	41	30	24	23	15	25	22	23	11	12	14	29	....	30.2
New York, N. Y.	Maximum	61	54	49	56	60	59	56	56	48	55	58	53	45	52	60	58	57	47	60	42	49	38	43	51	56	52	27	37	42	51	....	51.1
	Minimum	47	41	37	39	47	49	52	48	44	46	45	35	34	31	41	48	36	32	42	30	34	27	24	36	37	16	12	20	25	33	....	36.3
The Southern Interior.																																	
Belleplain	Maximum	67	56	53	58	67	60	65	60	54	60	63	58	47	51	62	67	61	53	65	58	54	40	48	52	62	57	32	58	46	52	....	56.2
	Minimum	41	31	27	21	37	51	56	49	49	49	32	35	30	19	27	30	45	32	47	31	25	24	17	25	23	28	12	15	12	33	....	31.8
Bridgeton	Maximum	62	58	57	56	65	62	60	58	56	58	62	55	46	54	60	65	60	51	63	47	55	40	45	52	60	53	34	37	45	54	....	54.3
	Minimum	43	35	35	28	40	45	49	47	47	48	36	34	30	24	34	34	40	31	44	31	28	27	20	29	28	22	14	17	20	31	....	33.0
Burlington	Maximum	64	59	57	63	67	64	65	60	61	58	65	67	43	53	61	68	64	55	66	55	60	52	49	45	62	57	31	39	46	54	....	57.0
	Minimum	46	40	34	26	39	45	46	52	36	49	35	26	37	26	29	33	35	32	42	34	29	30	23	29	26	29	12	16	20	32	....	32.9
Camden	Maximum	64	55	50	60	69	60	59	60	52	60	67	47	44	54	62	68	55	47	65	40	52	39	49	50	61	50	31	37	45	54	....	53.5
	Minimum	46	41	32	26	42	46	50	48	45	42	36	36	30	28	30	35	36	33	42	31	30	28	21	30	26	19	13	17	24	36	....	33.8
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Freehold	Maximum	61	54	52	58	63	60	59	55	50	56	62	55	41	52	61	64	58	47	65	58	49	42	42	50	58	50	29	33	44	51	....	52.6
	Minimum	55	35	32	25	43	45	46	50	45	48	37	35	32	25	33	39	44	35	42	27	30	26	18	32	29	26	12	19	17	30	....	33.7
Hammonton	Maximum	65	57	52	62	67	64	59	57	52	60	65	56	46	53	63	71	60	53	65	51	54	44	47	52	61	55	48	36	44	51	....	55.7
	Minimum	39	32	30	22	36	45	50	45	45	45	30	32	27	20	31	29	42	28	42	28	25	24	16	24	23	20	10	13	15	29	....	29.9
Hightstown	Maximum	62	55	50	59	62	61	56	56	52	53	64	58	42	52	61	64	60	47	64	58	48	44	47	51	57	53	30	34	45	51	....	53.2
	Minimum	43	35	32	24	42	44	52	51	44	45	34	34	32	25	32	34	42	29	41	31	27	25	18	32	37	28	12	16	17	29	....	32.9
Indian Mills	Maximum	64	57	50	62	68	65	60	59	55	58	64	58	42	55	63	70	63	50	64	59	52	48	48	50	62	56	31	34	43	50	....	55.3
	Minimum	41	32	30	21	38	43	52	52	47	48	32	35	30	20	28	31	44	30	44	33	24	22	18	26	23	30	13	17	17	30	....	31.7
Lakewood	Maximum	63	57	49	55	66	61	57	57	55	57	60	57	43	52	61	65	60	47	63	59	52	42	42	50	59	52	29	34	44	51	....	53.3
	Minimum	42	34	32	23	39	43	54	52	47	45	32	36	33	22	28	32	46	32	44	32	25	25	19	28	24	29	14	18	18	34	....	32.7
Moorestown	Maximum	63	56	50	59	64	62	59	58	52	58	62	42	43	53	61	66	52	46	65	41	51	38	44	50	59	50	30	35	45	52	....	52.2
	Minimum	44	35	28	25	42	46	52	48	46	42	36	35	28	26	30	32	35	32	41	30	28	24	20	30	28	17	12	16	16	32	....	31.9
Pemberton	Maximum	64	54	51	60	65	61	59	58	53	58	63	58	49	52	61	68	60	49	65	56	51	44	46	51	59	52	31	35	45	51	....	54.3
	Minimum	45	35	33	26	43	46	54	52	47	49	34	36	34	24	34	35	44	32	44	33	28	27	22	29	25	28	13	17	18	28	....	33.8
Pleasantville§§	Maximum	66	57	52	57	68	65	63	62	61	59	61	45	46	52	60	65	56	61	62	61	56	48	46	52	59	52	52	38	45	53	....	56.0
	Minimum	41	34	31	24	36	52	56	52	50	51	30	36	30	19	27	31	48	32	40	35	24	24	20	25	22	28	13	16	18	20	....	32.2
Runyon	Maximum	62	60	62	60	62	62	56	57	57	62	62	54	60	54	61	61	60	62	64	58	57	54	49	49	50	46	31	44	46	50	....	55.7
	Minimum	34	22	26	15	32	33	51	52	42	42	34	27	24	15	20	26	30	36	54	30	26	16	12	22	18	26	11	12	10	22	....	27.4
Trenton	Maximum	63	54	50	58	63	59	55	56	49	56	62	49	40	52	60	66	56	44	63	41	49	39	45	49	58	50	30	34	46	54	....	51.7
	Minimum	43	39	35	33	46	47	51	47	44	46	40	34	32	30	36	36	36	31	41	31	33	27	22	35	31	17	12	18	22	35	....	34.3
Tuckerton	Maximum	66	60	55	56	61	58	62	60	57	60	60	60	57	55	60	58	57	50	62	55	56	51	46	52	58	55	40	41	48	60	....	55.9
	Minimum	47	44	38	36	42	49	50	52	48	49	42	40	32	20	38	39	30	35	35	30	31	29	18	33	38	10	16	18	25	38	....	35.1
Philadelphia, Pa.	Maximum	64	56	52	59	64	62	59	59	53	60	62	50	43	52	60	67	56	47	64	43	53	40	44	52	58	53	31	37	48	54	....	53.4
	Minimum	46	44	42	39	48	52	54	49	48	49	45	37	35	33	42	42	39	35	43	33	35	30	26	38	40	20	16	22	25	38	....	38.2
The Sea Coast.																																	
Asbury Park	Maximum	62	55	49	54	66	59	57	57	51	57	57	56	47	52	56	57	58	51	61	55	51	40	42	51	53	53	30	35	43	53	....	52.3
	Minimum	46	39	37	34	47	52	53	50	48	49	40	37	34	29	38	41	42	39	50	33	31	30	24	37	34	24	18	26	24	35	....	37.4
Atlantic City	Maximum	66	57	51	57	64	59	61	55	58	61	60	58	47	51	57	62	60	55	62	44	56	40	51	53	57	57	31	37	44	52	....	54.1
	Minimum	43	39	38	37	49	54	54	52	51	49	47	35	34	33	49	48	39	37	44	36	37	29	27	41	40	22	17	21	24	35	....	38.7
Long Branch	Maximum	60	55	50	53	62	60	59	58	51	59	60	54	49	54	63	60	59	49	63	40	45	39	38	47	53	48	30	33	41	50	....	51.4
	Minimum	42	38	30	27	46	47	43	48	40	43	40	33	30	29	39	44	30	30	40	27	26	27	20	30	23	20	16	24	25	31	....	32.9
Sandy Hook	Maximum	60	53	48	52	61	56	54	55	50	55	56	52	42	51	56	60	57	50	61	46	47	37	41	48	54	51	29	34	43	48	....	50.2
	Minimum	47	44	41	40	49	51	52	48	45	47	44	38	35	34	41	46	39	35	46	33	36	30	27	39	37	22	17	24	30	36	....	38.4

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	.060	.094	.096	.064	.096	.064	.050	*	.068	.202	.080	.128	.112	....	....	.272	.036	.144	*	*	....	....	....	.074	....	.042	....	....	....	....	....	......
	Wind movement	91	85	35	33	26	48	44	85	126	185	43	109	95	45	44	36	53	63	110	139	46	52	31	84	24	72	193	122	91	87	....	2297
Runyon	Evaporation	.120	.080	.090	060	.040	.045	.300	.020	.000	.070	.060	.060	.060	.065	.070	.070	.000	.060	.280	.080	.080	.080	.080	.080	.080	.000	....	....	....	....	....	......
	Wind movement	88	16	14	14	30	30	33	57	162	156	24	42	37	62	30	27	30	44	53	36	30	27	5	21	22	33	32	33	20	22	....	1228

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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24

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVII. December, 1932. No. 12.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Very warm weather prevailed during the first week of the month and again during the last ten days, with a period of real winter weather throughout the middle portion. The highest temperatures were registered mostly on the 3d and a few other dates during the first week, and were mostly in the sixties; the lowest were close to the zero mark, or slightly below it, and were recorded during the period from the 15th to 21st. Near the coast, however, it did not generally get below ten degrees.

Precipitation occurred frequently, so much so as to equal the record for number of rainy days established in both 1902 and again in 1906, yet the average amount for the State was only 74% of the normal. The Highlands received the smallest monthly total, about 57% of normal, while the Seacoast and Southern Interior experienced the greatest with about 87% of normal. There was not much rain during the first decade, but it either rained or snowed on a majority of the days during the remainder of the month. Snow formed about one-third of the total monthly precipitation, except in the Highlands where it constituted about one-half of it. Most of the snow occurred on the 11-12th and 17-18th, especially the latter dates when the average fall for the State was about seven inches; during this storm the heaviest amounts were received in the southern portion where amounts ranging between seven and eleven inches fell.

There were several windy days but at no time were the velocities high enough to do appreciable damage.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 36.0°, which was 3.8° above normal. The highest temperature was 69° at Elizabeth and Boonton on the 4th and 31st respectively, and the lowest, —6°, at Charlotteburg and Somerville on the 19th. The greatest daily range of temperature was 49° at Boonton on the 22d. The highest monthly mean temperature was 41.4° at Tuckerton, and the lowest, 31.0° at Layton.

The temperature departure from the normal for the year, 1932, by sections, is: The Highlands, +2.1°; Red Sandstone Plain, +1.8°; Southern Interior, +2.0°; Sea Coast, +2.1°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 3.08 inches, which was 1.06 inches below normal. The average total snowfall at 20 selected stations was 10.1 inches. The greatest monthly precipitation was 4.72 inches, at Tuckerton, and the least, 1.52 inches at Boonton. The greatest amount of precipitation in any 24 consecutive hours was 1.95 inches at Asbury Park on the 17-18th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 4 more than normal.

The precipitation accumulated departure from the normal for the year 1932, by sections, is: The Highlands. +0.25 inch; Red Sandstone Plain, —1.98 inches; Southern Interior, +2.83 inches; Sea Coast, —3.41 inches.

WIND.

The prevailing wind direction was from the West. The wind movement averaged 12 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 40 miles per hour from the Northeast at Atlantic City on the 17th.

MISCELLANEOUS.

The per cent of possible sunshine was 53, or 1 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.18 inches, or 0.08 inch above normal. The highest reading was 30.67 inches at Trenton on the 16th, and the lowest 29.46 inches at Long Branch and Sandy Hook on the 31st.

The mean stage of the Delaware River at Phillipsburg was 3.1 feet, and the highest 5.1 feet on the 1st. The mean stage at Trenton was 1.9 feet, and the highest 2.8 feet on the 28th.

Dense fog occurred on the following dates: 3, 5. 12, 19, 21, 23, 25, 26, 28 and 30th. Sleet occurred on the 11th, 12th, 13th, 14th, 17th and 22d, at scattered places in the State.

ERRATA.

June 1932. Camden, lowest temperature should be 49° on the 8th. Flemington, greatest 24-hour precipitation should be 0.49 on the 17th. July 1932. Long Branch, number of days with .01 precipitation or more should be 11. September 1932. Sandy Hook, precipitation on 26th 0.00, on 27th 0.11, on 28th .0.07; relative humidity at noon 61%. November 1932. Long Branch, greatest 24-hour precipitation 2.25 on the 1st.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature			Precipitation				No. of days			
	Mean	Highest	Lowest	Mean	Greatest.	Least	Snowfall	Clear	Partly cloudy	Cloudy	.01 inch or more prec.
1885	35.3	60	6	3.15	4.33	2.47	......	......	......	......	......
1886	29.1	60	−2	3.51	4.65	1.62	......	......	......	......	......
1887	33.7	62	6	5.29	7.32	3.64	......	......	......	12	10
1888	34.9	65	5	3.69	4.95	2.05	......	......	......	8	8
1889	**41.5**	71	8	1.62	3.69	**0.25**	......	......	......	9	9
1890	30.9	56	3	3.89	5.74	2.34	......	11	10	10	8
1891	40.9	71	9	4.25	5.32	2.25	......	13	9	9	8
1892	30.4	68	1	1.87	3.09	1.30	......	9	11	11	6
1893	34.9	70	5	3.39	4.66	1.67	......	11	10	10	11
1894	34.8	66	−3	4.36	6.39	1.64	......	12	9	10	9
1895	37.2	70	3	2.61	5.42	1.71	0.4	11	9	11	6
1896	31.3	64	−15	**1.48**	2.70	0.85	10.7	14	9	8	4
1897	35.1	69	−3	4.90	6.44	3.07	3.4	8	11	12	11
1898	33.3	66	−2	3.53	4.85	2.38	2.0	12	10	9	9
1899	35.5	69	−1	2.11	4.30	1.29	0.5	14	10	7	7
1900	34.4	64	−2	2.59	3.97	1.47	4.1	14	10	7	6
1901	32.6	68	−8	**7.30**	**9.45**	4.87	2.1	12	9	10	11
1902	31.7	62	−11	7.23	8.99	5.81	9.1	13	7	11	13
1903	28.6	56	−13	4.08	5.49	3.20	9.2	14	9	8	9
1904	27.0	60	−15	3.19	5.38	2.06	**21.1**	10	7	14	12
1905	36.3	61	5	3.65	5.60	2.58	1.5	14	8	9	**7**
1906	33.0	70	−5	3.99	6.18	2.70	1.4	9	8	14	13
1907	36.6	70	−3	4 91	7.13	3.55	5.9	12	8	11	9
1908	34.0	**72**	1	3.63	5.26	2.10	7.8	10	8	13	11
1909	29.8	60	−15	4.45	5.51	3.55	12.6	14	8	9	5
1910	26.5	58	−14	2.79	4.60	1.92	11.3	11	10	10	9
1911	38.4	70	2	3.77	5.09	2.94	5.6	10	7	14	11
1912	36.9	68	−1	4.73	6.33	3.40	11.0	12	9	10	9
1913	37.7	63	−11	3.03	4.59	1.47	0.8	13	9	9	7
1914	31.1	66	−9	5.86	9.12	2.99	2.4	10	6	15	12
1915	31.9	64	3	4.82	7.83	2.19	13.6	12	9	10	8
1916	32.3	70	−8	4.61	6.34	3.35	12.6	13	8	10	11
1917	**24.8**	54	**−21**	3.18	5.46	1.55	11.5	13	7	11	8
1918	37.5	66	9	3.92	4.94	3.21	0.5	12	7	12	10
1919	28.8	67	−18	2.98	5.14	1.84	6.8	10	8	13	12
1920	36.4	69	7	5.10	6.63	2.86	1.0	11	8	12	8
1921	32.3	64	−4	2.37	3.23	1.62	6.2	13	8	10	9
1922	32.5	65	−8	3.86	5.26	3.09	7.3	9	9	13	12
1923	40.8	69	9	4.14	5.14	2.44	2.6	13	7	11	12
1924	32.8	68	−4	2.58	3.42	1.85	0.4	10	8	13	8
1925	34.0	61	−5	2.84	4.58	1.08	0.6	13	7	11	10
1926	28.4	52	−7	3.44	4.74	1.67	8.2	11	7	13	11
1927	35.3	70	2	4.54	5.76	2.80	**T.**	13	6	12	12
1928	36.3	63	3	1.64	4.63	0.69	2.7	15	5	11	8
1929	33.8	68	2	3.01	4.34	1.00	4.1	11	6	14	10
1930	33.0	60	−5	2.67	3.92	1.58	5.2	10	7	14	8
1931	39.6	72	7	2.27	3.24	1.57	0.4	13	5	13	9
1932	36.0	69	−6	3.08	4.72	1.52	10.1	12	6	13	13
Normal	32.2	......	......	4.14	......	......	5.7	12	9	10	9
Extremes	......	72	−21	......	9.45	0.25	......	......	......	......	......

W. B. O. Philadelphia-1-27-33-850.

Climatological Data for December, 1932

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	33.2[a]	+2.6	62	3†	−2	19	35	2.45	−1.62	0.56	8.5	10	13	6	12	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	34.0	+4.2	66	4	−6	19	38	2.62	−1.71	0.65	11.3	14	16	4	11	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	1	17	....	1.77	−1.89	0.40	8.5	12	11	9	11	e.	Brice E. Riker.
Dover	Morris	600	48	33.8	+3.9	64	3	0	19	34	2.59	−1.71	0.65	10.9	12	10	7	14	......	William C. Harris
Layton	Sussex	480	31	31.0	+3.6	63	3†	−5	19	39	1.78	−2.16	0.43	6.0	10	9	4	18	w.	A. M. Depue.
Long Valley	Morris	620	1	33.4	......	60	3†	−5	19	38	2.13	......	0.75	9.2	10	14	2	15	s.	S. N .Dilts.
Newton	Sussex	769	48	35.3	+5.2	67	1†	2	17	35	1.81	−1.90	0.45	12.6	15	9	8	14	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	32.1	+0.8	62	3†	0	19	34	2.92	−0.82	0.74	10.5	13	8	8	15	......	Town Engineer.
Sussex	Sussex	442	37	31.2	+1.3	59	7†	−4	19	33	1.83	−1.73	0.48	10.3	12	12	5	14	......	A. J. W. Mowatt
Means and extremes	......	......	....	33.0	+3.1	67	1†	−6	19	39	2.21	−1.69	0.76	9.8	12	11	6	14	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	34.0	+3.5	69	31	1	19	49	1.52	−2.46	0.49	......	8	12	2	17	sw.	John Kline.
Canoe Brook	Essex	173	2	33.2	......	65	7	4	21	46	2.44	......	0.68	......	11	14	6	11	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	3.40	−0.77	0.92	11.0	10	12	8	11	......	Paul Molitor, Sr.
Elizabeth	Union	45	53	36.8	+3.5	69	4	5	19	40	1.64	−2.32	0.37	8.3	11	14	5	12	w.	Union County Park Comm.
Flemington	Hunterdon	140	§46	35.4	+3.4	67	1	−3	19	39	2.75	−1.01	0.69	10.0	15	16	4	11	sw.	Hiram E. Deats.
Jersey City	Hudson	10	34	38.4	+4.3	64	7	12	16†	26	2.65	−1.28	0.62	9.6	15	10	9	12	w.	S. K. Pearson.
Lambertville	Hunterdon	430	45	35.4	+1.8	63	3†	4	19	29	2.90	−0.97	0.52	13.0	16	14	7	10	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	35.4	+3.9	67	3†	1	19	43	2.16	−1.93	0.65	5.7	11	17	6	8	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	35.9	+2.7	65	7	3	19	34	2.75	−0.92	0.65	9.8	13	13	6	12	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	2.16	......	0.65	......	11	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	37.0	+3.9	65	7	9	17	28	2.76	−1.30	0.47	9.6	18	11	3	17	w.	Philip Del Vecchio.
Plainfield	Union	120	44	34.8	+2.1	66	7	1	19	32	2.53	−1.53	0.59	9.6	14	11	8	12	w.	S. K .Pearson.
Ridgefield	Bergen	80	15	35.7	......	65	7	9	19	36	2.55	......	0.84	8.4	14	11	7	13	nw.	George P. Kirsten.
Somerville, (near)	Somerset	70	49	34.2	+2.0	66	5†	−6	19	41	2.51	−1.34	0.64	9.0	12	11	4	16	w.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	2.04	......	0.61	......	10	....	....	....	......	Hackensack Water Co.
New York, N.Y.	......	365	62	39.0	+4.0	62	7	12	16	36	2.62	−1.00	0.73	9.4	15	10	5	16	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	35.5	+3.1	69	4†	−6	19	49	2.45	−1.44	0.92	9.5	13	13	6	12	w.	
The Southern Interior.																				
Belleplain	Cape May	30	38	38.4	+3.3	68	3	−3	19	42	3.46	−0.49	1.22	8.0	11	7	5	19	ne.	A. F. Waldron.
Bridgeton	Cumberland	30	49	37.9	+1.7	66	3	7	19†	34	4.05	+0.23	1.28	13.8	12	15	2	14	s.	Bennett K. Matlack
Burlington	Burlington	12	§46	37.4	+3.6	65	3†	4	21	37	3.79	−0.53	1.10	9.0	12	16	2	13	sw.	Public Service Power Co.
Camden	Camden	20	....	36.8	......	68	3	2	19	34	3.05	......	1.05	10.6	14	8	8	15	sw.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	37.3	......	63	6†	7	19	36	4.23	+0.51	0.90	12.5	15	12	7	12	sw.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	37.0	......	68	3	−1	21	42	2.81	−0.79	1.10	8.9	13	16	3	12	ne.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	38	36.4[b]	+3.8	64	3	1	21	34	2.06	−1.63	0.85	10.0	10	10	8	13	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	43	37.8	+4.0	67	3†	0	19	38	3.53	−0.87	1.40	12.0	11	9	9	13	sw.	James M. Armstrong.
Lakewood	Ocean	54	28	37.5	+4.0	66	2	2	21	38	2.65	−1.99	0.65	13.6	16	10	10	11	sw.	R. W. Holman.
Moorestown	Burlington	......	69	36.4	+2.9	65	3	2	21	38	2.86	−0.83	1.06	9.9	13	10	9	12	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	3.81	−0.31	1.14	11.2	13	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	37.4	......	67	7	1	19	35	2.67	......	0.92	9.7	16	13	6	12	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	37.0	......	67	3	−1	19	44	4.12	−0.12	1.10	......	10	15	3	13	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	3.85	......	1.25	8.0	9	14	4	13	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	32.8[a]	......	65	3	−10	19	44	2.79	......	1.10	......	8	18	5	8	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	37.4	+3.0	65	7	9	17	37	3.05	−0.30	1.06	8.9	14	10	7	14	sw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	3.12	......	0.83	12.8	12	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	41.4	+7.0	66	3	11	16	26	4.72	+0.21	1.34	9.0	14	11	6	14	w.	John H. Brown.
Philadelphia, Pa	......	117	61	40.4	+4.1	67	3	15	16	34	3.13	−0.30	1.21	9.6	12	8	7	16	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	37.3	+3.7	68	3	−3	19	44	3.37	−0.63	1.40	10.5	12	12	6	13	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	39.4	+4.4	64	3†	14	16	24	4.37	+0.62	1.95	14.0	16	20	2	9	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	41.2	+4.8	68	3	15	16	25	4.04	+0.10	1.37	8.2	15	8	6	17	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	37.8	+3.7	65	3	7	21	34	3.13	−1.61	0.84	11.1	16	11	9	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	38.4	+4.0	60	31	14	17	33	3.01	−1.03	0.86	10.2	15	9	8	14	w.	U.S. Weather Bureau.
Means and extremes	......	......	....	39.2	+4.2	68	3	7	21	34	3.64	−0.50	1.96	10.9	15	12	6	13	nw.	
For the State	......	......	....	36.0	+3.8	69	4†	−6	19	49	3.08	−1.06	1.95	10.1	13	12	6	13	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for December, 1932

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						T.					.20	.50		.18			.35					.09			.17		.24	.56		.08	.08	2.45
Charlotteburg	Passaic								.04		.08	.18	.47		.16			*	.65				.08		.04	.18		.04	.58		.07	.05	2.62
Culvers Lake	Delaware								T.		.08	.17	.40	T.	.12			.11	.15						.05	.12		.10	.40		.02	.05	1.77
Dover	Passaic							.05			*	.58		.19				.65						.08	*	.20		.53	.14		*	.17	2.59
Layton	Delaware							T.	.10		*	.17	.43		.15			.09	T.							.23		.43	.12		.06	T.	1.78
Long Valley	Morris								.06		T	.02	.38		.10			.50	T.				.06			.14		.30	.45		T.	.12	2.13
Newton	Delaware							.04	.14		.04	.13	.09	.04	.23			.45	.07				.04				.14	.04	.20		.04	.12	1.81
Phillipsburg	...do							.03			.13	.07	.51	.35		T.		.74	.06				.09	T.	.02	.08	T.	.62	.16		.06	T.	2.92
Sussex	Hudson								.02		.10	.12	.10		.20			.21	.40						.04	.07		.07	.48		.02		1.83
The Red Sandstone Plain.																																	
Boonton ‖	Passaic								T.			.07	.26		.21				.23				.01		T.	.14	T.		.49	.11		T.	1.52
Canoe Brook ‖	Essex								.03			.17	.41		.15				.50				.05			.12	.18		.68	.11		.04	2.44
Chatham ‖	...do								.09			.22	.61	.03					.92							.51	.04		.64	.22		.12	3.40
Elizabeth	Coast					T.			.02		.04	.07	.37	T.	.20			.35	.24						T.	.21				.02	.05	.07	1.64
Flemington	Raritan							T.	.05		.05	.23	.32	T.	.08			.47	.18				.08		.03	.15	.02	.24	.69	T.	.08	.08	2.75
Jersey City	Coast				T.			.05			.12	.18	.43	.20				.50	.12				.04		.01	.15	.01	.54	.20		.08	.02	2.65
Lambertville	Delaware								.05		.17	.29	.30	.06	.08	T.		.42	.22				.03	.04		.19	.03	.37	.52		.09	.04	2.90
Little Falls ‖	Passaic								.04			.15	.42		.17				.30				.06		.01	.24	T.		.65	.09		.03	2.16
New Brunswick	Raritan								.02		.08	.10	.48	T	.11	T.		.56	.20				.04		T.	.14	T.	.22	.65	T.	.09	.06	2.75
New Milford ‖	Hackensack								.03			.15	.28	.04	.21				.27							.22	.03		.65	.24	.04		2.16
Paterson	Passaic				.02				.06		.06	.20	.46	.01	.12			.15	.40				.15		.04	.16	.05	.27	.47	.04	.05	.05	2.76
Plainfield	Raritan							.03			.12	.12	.30		.16			.47	.10				.03	.01		.18		.59	.33		.08	.01	2.53
Ridgefield**	Hackensack				T.		T.	.05			.02	.25	.42	T.	.20			.40	.10				.04		.01	.16		.18	.66		.05	.01	2.55
Somerville	Raritan								.04		.09	.10	.47		.16			.33	.15							.19		.64	.18		.11	.05	2.51
Woodcliff Lake ‖	Hackensack								.04			.19	.49						.26				.06		.08	.22	.06		.61			.03	2.04
New York, N. Y***	Coast				T.			.04			.16	.16	.39	.20				.60	.01				.04	.01	T.	.14	.01	.63	.13		.09	.01	2.62
The Southern Interior.																																	
Belleplain	Tuckahoe								T.			.21	.13	.01	.06			*	.80									.48	1.22	.07	.07	.41	3.46
Bridgeton	Delaware										.20	.13	.06		.07			1.28	.09							T	.04	.98	.94	.05	.06	.15	4.05
Burlington	Delaware										.05	.80		.02	.26			.60	.20				.11		T.	.04		.37	1.10		.10	.14	3.79
Camden***	..do				T.			T.			.15	.08	.03	.35		T.		.85	.05				.05	.01	.01	.03		.85	.43		.05	.11	3.05
Clayton	...do																																
Freehold	Raritan							.04			.50	.35	.65		.22			.50	.40			.05			.05	.05		.35	.85	.05	.09	.08	4.23
Hammonton	Mullica					T.			.01		.21	.01	.17	.02	.09			.56	.06				T.	T.	.01	T.	T.	.43	1.10	T.	.05	.09	2.81
Hightstown	Raritan								.02				.37		.22								.03	.03	.06			.30	.85		*	.18	2.06
Indian Mills	Mullica								.07		T.	.18	.22		.15			.78	.24							.06		.20	1.40	.05		.18	3.53
Lakewood	Metedeconk					.06			.07		.08	.29	.48	T.	.16			.65	.40						.01	.03	.02	.10	.12	.03	.05	.10	2.65
Moorestown ‖	Delaware								.02			.17	.18		.21		T.		.70				.04		.01	.04	.02		1.06	.30	.06	.05	2.86
Northfield	Coast								.01		.12	.20	.19	.02	.06			1.06	T.								.04	.55	1.14	.06	.10	.26	3.81
Pemberton	Delaware					T.			.01		.03	.08	.19	.02	.12	T.		.72	.12				.03	. .	.02	.01	T.	.29	.92	.01	.04	.06	2.67
Pleasantville ‖	Coast					.08			.05			.31	.27		.12			T.	1.05								T.		1.10	.73	.03	.08	4.12
Port Norris	Maurice										.05	.23	.10		.07			1.25										1.23	.50		.14	.28	3.85
Runyon	Coast											.25	.80					1.10								.18		.20	.06	..	.09	.11	2.79
Trenton***	Delaware				T.			.04			.17	.22	.11	.28	T.	T.		.71	T.				.07	.03	.02	.06		.78	.37		.12	.07	3.05
Trenton No. 2 ‖	...do								.03			.27	.40		.28	T.	T.		.77				.06		.02	.08	.01		.83	.29		.08	3.12
Tuckerton	Coast				.02			.11			.22	1.34	.04	.08	.02			.90									.04	.69	.80	.08	.06	.32	4.72
Phila., Pa***	Delaware				T.			.02			.26	T.	.15	.19	T.	T.		.93	T.			T.	.10	.01	T.	.04		.87	.40		.05	.11	3.13
The Sea Coast.																																	
Asbury Park	Coast				T			.01	.16			.42	.20	.16	.06				1.95				T.		.04	.03		.67	.56	.02	.06	.03	4.37
Atlantic City***	...do				.01			.05			.32	.20	.06	.11	.01			1.22	.06						T.	.04	.01	.81	.82		.05	.27	4.04
Long Branch**	...do				.09			.07			.27	.13	.22	.13				.56	.06				.09	T.		.06	.02	.36	.84		.13	.10	3.13
Sandy Hook***	...do				.02			.03			.10	.19	.65	.16				.64	T.				.03	.03	T.	.06	.01	.59	.38		.09	.03	3.01

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

MISCELLANEOUS DATA

Stations.	Pressure					Wind				Moisture			Sunshine
							Highest						
	Monthly mean	Highest	Date	Lowest	Date	Hourly velocity	Miles per hour	Direction	Date	Relative humidity per cent at 8 a m	Relative humidity, per cent at 12 noon	Relative humidity, per cent at 8 p m	Percentage of possible sunshine
Atlantic City	30.20	30.64	16	29.52	31	15.7	40	ne.	17	81	75	78	56
Camden		30.65	16†	29.48	31	8.0	35	n.	31				
Long Branch	30.16	30.64	17	29.46	31					69	65	67	
New York, N. Y	30.17	30.65	17	29.48	31	14.5	44	nw.	31	66	60	69	55
Philadelphia, Pa	30.20	30.68	17	29.53	31	12.8	38	nw.	31	67	61	66	48
Ridgefield	30.17	30.65	17	29.49	31								
Sandy Hook	30.17	30.64	17	29.46	31	13.7	38	nw.	31	80	74	79	48
Trenton	30.18	30.67	16	29.48	31	10.2	35	sw.	31	78	64	73	55

Daily Temperatures for December, 1932

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	61	52	62	56	52	58	62	57	....	31	31	35	35	31	30	25	18	30	20	33	32	50	42	45	48	46	41	42	43	43	59	42.3[a]
	Minimum	26	23	32	34	34	28	38	30	....	23	20	20	24	22	16	16	7	7	−2	2	2	26	27	35	38	40	27	35	24	32	34	24.0[a]
Charlotteburg	Maximum	59	61	63	66	53	56	62	59	35	32	32	36	36	31	28	25	14	25	33	36	39	48	48	46	59	58	41	43	48	58	60	44.8
	Minimum	35	23	43	29	36	25	37	29	15	19	19	21	23	22	20	6	3	8	−6	11	−3	30	15	32	38	39	24	33	22	32	40	23.2
Dover	Maximum	60	60	64	57	57	59	62	53	43	34	26	37	34	31	28	20	17	29	32	37	38	48	44	45	53	55	44	44	47	46	58	43.9
	Minimum	35	27	31	32	37	28	45	22	19	21	21	23	23	23	15	7	7	9	0	9	4	28	18	36	39	29	27	35	23	35	26	23.7
Layton	Maximum	61	57	63	59	52	53	63	52	34	29	23	41	35	29	30	20	9	31	30	40	38	48	41	48	51	51	32	41	48	44	60	42.4
	Minimum	22	18	29	27	36	23	35	24	14	16	20	20	23	24	13	0	−2	0	−5	3	1	27	12	34	37	28	22	32	21	26	31	19.7
Long Valley	Maximum	58	52	60	53	52	51	60	57	35	34	34	36	37	35	35	24	20	28	29	32	36	46	42	44	52	53	40	43	45	48	59	42.9
	Minimum	37	26	34	29	36	26	44	33	18	21	21	23	25	22	19	8	8	11	−5	4	−2	28	13	35	39	39	28	34	28	24	39	24.0
Newton	Maximum	67	61	67	59	64	62	66	57	37	36	32	39	40	38	31	25	13	31	31	40	40	57	49	53	56	59	39	53	43	45	62	46.8
	Minimum	32	39	38	36	35	31	42	22	16	18	16	17	21	19	15	3	2	4	8	13	12	30	23	34	38	31	26	28	24	32	34	23.8
Phillipsburg	Maximum	36	49	62	53	48	57	62	54	55	32	30	36	33	23	23	15	16	30	28	24	35	43	38	44	48	46	40	40	39	48	60	40.2
	Minimum	32	26	30	32	36	28	42	22	28	23	21	29	27	18	14	10	9	4	0	7	5	29	17	35	38	30	29	35	26	37	26	24.0
Sussex	Maximum	56	47	57	52	51	47	59	59	32	32	29	35	35	31	31	24	15	18	25	32	33	44	38	42	50	50	39	42	41	42	42	39.7
	Minimum	23	22	32	31	36	36	35	31	18	21	20	20	24	15	17	4	3	6	−4	4	0	30	15	34	41	38	25	32	22	31	38	22.6
The Red Sandstone Plain.																																	
Boonton§§	Maximum	60	60	65	60	52	58	66	39	37	28	34	39	34	31	32	26	20	31	33	40	42	51	47	48	55	52	41	44	50	66	69	45.5
	Miuimum	35	25	27	33	38	27	30	30	18	20	22	23	27	23	24	11	8	8	1	3	2	2	19	18	35	43	26	29	25	27	36	22.4
Canoe Brook§§	Maximum	59	60	62	61	52	60	65	56	38	29	33	37	34	30	31	27	23	32	29	38	42	50	44	47	54	47	46	43	48	61	60	45.1
	Minimum	20	19	27	27	35	23	36	35	15	19	22	24	27	22	18	9	9	2	−2	−2	−4	15	10	29	35	39	23	32	21	34	40	21.3
Elizabeth	Maximum	62	60	63	69	55	60	65	65	40	47	28	38	38	34	35	25	20	34	29	44	37	52	50	48	53	54	43	45	52	49	65	47.1
	Minimum	22	26	32	30	38	28	47	31	23	24	24	26	29	26	24	12	11	13	5	11	8	25	19	37	28	41	30	37	28	39	44	26.4
Flemington	Maximum	67	60	65	59	55	59	63	58	42	33	27	38	38	33	33	28	19	36	31	41	37	52	45	44	47	54	45	43	48	45	61	45.4
	Minimum	39	27	35	32	38	28	42	33	20	23	22	25	27	25	20	10	10	10	−3	2	−1	30	15	34	37	41	29	36	26	33	42	25.4
Jersey City	Maximum	59	59	61	58	53	59	64	54	40	33	34	40	38	33	33	22	20	32	31	39	38	51	46	50	55	56	44	47	50	51	61	45.5
	Minimum	37	40	41	44	41	41	49	28	24	25	25	33	29	28	20	12	12	16	17	21	20	31	33	38	44	38	35	39	32	40	39	31.4
Lambertville	Maximum	62	57	63	57	54	59	63	57	39	30	28	38	38	31	29	24	15	31	29	36	36	48	42	43	55	55	37	43	47	44	60	43.5
	Minimum	37	39	40	37	37	35	46	28	19	22	21	25	26	24	20	9	10	10	4	16	14	29	28	36	37	31	31	35	27	34	39	27.3
Little Falls§§	Maximum	60	63	67	62	54	60	67	40	39	28	33	39	38	31	33	29	31	34	34	43	43	53	47	50	56	49	46	44	52	62	62	46.7
	Minimum	28	25	33	32	40	28	35	36	20	23	21	23	28	26	23	10	8	10	1	9	4	10	19	29	34	37	27	32	26	32	39	24.1
New Brunswick	Maximum	61	60	63	61	56	62	65	60	39	36	27	37	39	33	29	25	19	28	30	35	38	47	44	46	52	56	43	43	45	45	62	44.7
	Minimum	32	28	35	35	38	31	47	33	21	23	23	26	28	26	21	11	11	12	3	14	4	29	17	34	40	42	31	36	29	37	42	27.1
Paterson	Maximum	58	59	64	58	54	55	65	57	36	34	26	38	39	33	31	25	17	33	31	37	38	48	47	50	54	55	44	45	47	46	62	44.7
	Minimum	32	31	41	42	41	33	44	32	22	24	23	24	29	27	24	12	9	12	10	20	14	34	27	39	40	43	31	37	32	40	41	29.4
Plainfield	Maximum	60	57	62	61	53	59	66	53	39	31	27	38	38	31	32	22	15	31	29	36	35	49	44	48	53	56	41	46	49	49	61	44.2
	Minimum	28	25	30	33	39	27	44	28	19	22	22	26	27	25	20	10	10	10	1	8	5	28	18	33	40	40	27	39	25	36	39	25.3
Ridgefield	Maximum	58	60	63	60	54	61	65	39	38	27	30	37	35	32	32	21	14	30	29	39	38	50	46	50	55	53	45	44	47	49	62	44.0
	Minimum	32	28	39	38	40	33	47	24	21	24	24	30	29	26	24	12	10	12	9	18	12	21	24	36	42	30	34	36	29	38	26	27.4
Somerville	Maximum	65	61	64	61	66	62	66	55	39	31	29	38	38	34	33	23	16	31	31	36	37	49	39	47	51	50	40	43	48	45	62	44.8
	Minimum	29	28	32	30	36	26	43	28	17	22	23	27	27	25	18	10	11	11	−6	2	−4	30	14	18	38	33	26	37	23	34	41	23.5
New York, N. Y.	Maximum	58	59	61	57	53	59	62	54	41	33	36	40	38	34	33	22	21	33	31	40	39	52	47	50	58	57	46	47	50	51	61	45.9
	Minimum	38	44	45	47	41	42	51	27	25	25	26	35	30	28	19	12	12	17	20	25	24	32	36	39	46	38	37	38	34	41	25	32.2
The Southern Interior.																																	
Belleplain	Maximum	63	63	68	63	55	64	66	54	54	32	58	50	43	45	40	28	33	33	39	39	40	50	47	48	63	63	48	48	48	49	59	50.1
	Minimum	29	23	32	31	43	26	43	35	14	19	28	35	30	32	19	12	16	9	−3	16	0	28	10	36	46	40	29	41	30	40	38	26.7
Bridgeton	Maximum	61	61	66	62	55	63	64	52	45	34	35	41	42	41	37	28	21	29	35	37	38	48	45	49	65	62	44	43	50	52	62	47.3
	Minimum	34	27	34	35	37	30	43	33	20	25	25	32	30	31	24	13	15	15	7	18	7	26	12	36	45	41	33	39	30	40	45	28.5
Burlington	Maximum	59	60	65	60	63	64	65	61	42	38	31	38	37	35	32	27	28	29	33	37	41	50	42	49	61	58	51	43	50	45	63	47.0
	Minimum	30	26	32	43	32	36	41	35	24	25	25	26	29	29	25	13	14	17	10	11	4	25	15	35	44	39	31	37	29	38	45	27.9
Camden	Maximum	60	62	68	62	57	64	66	50	43	32	34	38	38	36	35	22	20	32	32	36	36	49	42	48	59	57	42	45	49	53	62	46.1
	Minimum	36	28	37	34	39	31	49	26	23	24	24	32	30	30	17	14	13	5	2	10	4	29	18	36	46	38	33	40	31	41	28	27.4
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Freehold	Maximum	59	60	62	60	55	63	61	56	41	42	32	45	36	34	31	24	19	27	29	35	44	47	46	45	59	61	50	43	46	47	63	45.9
	Minimum	30	32	39	41	39	33	45	32	18	24	26	32	28	27	23	12	13	12	7	13	8	30	23	35	41	50	30	35	30	39	43	28.7
Hammonton	Maximum	61	65	68	64	56	64	66	57	45	35	34	48	40	43	38	30	21	30	38	39	41	51	48	48	64	63	44	44	53	48	63	48.7
	Minimum	30	25	35	28	36	26	38	25	15	23	26	31	26	28	21	11	11	12	2	14	−1	27	15	34	41	37	28	38	27	37	38	25.3
Hightstown	Maximum	60	54	64	62	62	64	61	61	42	41	30	41	36	35	31	28	25	31	31	36	35	48	45	45	59	60	46	44	51	....	....	45.8[b]
	Minimum	33	32	37	34	39	39	46	33	19	21	24	28	24	27	28	11	11	12	9	14	1	27	19	33	41	44	38	37	28	....	....	27.0[b]
Indian Mills	Maximum	60	63	67	64	60	65	67	60	45	40	32	47	46	43	34	30	20	30	37	35	39	50	48	48	63	64	45	44	50	49	63	48.6
	Minimum	32	25	35	32	40	27	42	37	15	25	25	31	27	30	17	12	14	9	0	17	1	26	13	38	44	45	30	40	30	37	40	27.0
Lakewood	Maximum	58	62	63	61	55	61	64	57	43	34	35	49	39	37	33	26	20	28	35	35	40	46	48	47	63	62	45	45	45	48	63	46.7
	Minimum	29	26	37	32	42	28	44	34	21	26	29	35	30	30	18	13	13	16	3	18	2	31	15	33	44	40	33	40	31	41	44	28.8
Moorestown	Maximum	60	62	65	62	55	63	64	52	43	28	34	36	36	33	34	22	19	29	32	36	38	48	44	48	62	....	42	44	49	58	63	45.4[a]
	Minimum	34	30	38	35	38	30	48	24	22	24	25	33	29	29	17	13	14	10	9	14	2	27	17	36	49	34	32	40	30	41	25	27.4
Pemberton	Maximum	60	60	65	62	57	64	67	57	42	37	32	45	37	36	34	27	21	28	33	35	39	48	45	47	62	62	44	44	50	50	63	46.9
	Minimum	32	26	32	36	40	30	45	34	21	26	26	30	29	30	22	13	16	14	1	12	4	26	13	35	43	41	33	40	30	40	43	27.8
Pleasantville§§	Maximum	62	65	67	57	55	55	59	50	46	38	51	40	47	36	39	24	33	31	38	39	41	50	48	52	62	55	54	46	48	53	60	48.4
	Minimum	29	23	30	29	37	29	41	38	18	20	30	35	30	32	21	11	14	16	−1	13	0	6	11	15	40	50	30	39	31	32	44	25.6
Runyon	Maximum	52	58	65	62	64	64	52	....	40	38	31	38	39	42	38	27	20	30	31	34	39	47	49	47	58	60	50	50	50	60	60	46.5[a]
	Minimum	15	19	22	26	24	28	30	....	26	20	11	16	18	16	15	11	10	3	−10	8	−5	24	12	27	28	27	22	34	20	38	42	19.2[a]
Trenton	Maximum	62	60	64	59	54	61	65	41	42	31	35	39	39	36	32	22	20	30	34	36	39	47	45	46	58	57	46	44	48	52	61	45.3
	Minimum	41	36	39	39	39	37	47	26	24	23	23	34	29	28	16	12	9	17	13	20	13	31	27	39	46	35	33	40	33	41	24	29.5
Tuckerton	Maximum	62	65	66	60	60	59	60	52	45	44	52	41	50	40	40	30	30	32	38	38	40	51	48	50	51	60	56	49	48	50	50	48.9
	Minimum	44	44	46	43	44	42	45	32	29	31	26	34	32	31	25	11	16	17	19	27	22	35	32	40	36	44	38	42	38	40	42	33.8
Philadelphia, Pa.	Maximum	62	60	67	60	55	59	64	53	42	37	37	42	39	37	36	23	23	32	33	39	38	51	44	49	60	59	43	47	51	53	61	47.0
	Minimum	44	44	44	43	44	42	51	30	29	26	26	35	32	31	19	15	16	20	19	28	22	34	32	43	48	41	38	42	38	44	27	33.8
The Sea Coast.																																	
Asbury Park	Maximum	58	62	64	53	54	53	55	55	43	35	42	49	52	36	32	23	28	28	34	36	41	47	48	47	51	63	45	45	45	48	64	46.3
	Minimum	35	39	44	42	42	39	48	31	28	30	31	32	30	30	22	14	15	18	15	20	19	33	29	38	46	39	37	42	35	42	41	32.5
Atlantic City	Maximum	61	58	68	55	54	53	56	54	44	41	50	51	47	39	39	25	35	31	38	39	43	50	48	49	54	58	47	45	47	49	56	47.9
	Minimum	36	39	45	47	44	44	50	30	27	31	39	38	33	33	21	15	18	20	23	26	25	36	33	42	47	36	37	42	35	43	33	34.5
Long Branch	Maximum	54	57	65	57	54	60	60	57	45	36	42	46	35	33	32	23	23	31	34	35	37	44	46	44	62	61	45	44	45	51	63	45.8
	Minimum	31	32	37	38	43	37	50	33	29	32	32	34	30	28	20	13	17	18	12	11	7	29	23	32	44	34	33	40	33	41	29	29.7
Sandy Hook	Maximum	53	56	59	53	52	53	58	54	40	36	43	46	36	35	32	22	23	30	31	34	38	44	44	48	55	55	43	40	44	41	60	44.2
	Minimum	40	39	42	42	42	40	49	30	28	26	28	36	31	30	20	15	14	21	20	25	24	34	32	37	43	38	37	40	38	40	27	32.5

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charge to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record.
**Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION,

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVII. ANNUAL SUMMARY, 1932. No. 13

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Taking the State as a whole, the average temperatures were above the normal in all months except March and November, the latter being only slightly colder than usual. January and February were very mild and, with the preceding December, constituted the second mildest winter on record, the previous winter being the mildest. The year accordingly made itself a part of the four-year period in which only nine out of a total of orty-eight months have been below normal. Below-zero temperatures were not recorded until the 19th of December and were onfined almost entirely to the northern half of the State, though a few stations in the southern part reported from one to three degrees below. Temperatures approaching close to the 100-degree mark were reported from a number of stations back from he Sea Coast during the months of July, August and September. The only 100-degree maximum was recorded at Sussex, Sussex County, during the last named month. The last killing frost of Spring came on such widely separated dates in the same ections that it is difficult to determine whether they were earlier r later than usual. The first killing of Autumn came on September 26th and October 14th over the northern half, and on October 14th and 31st in the southern part, except, of course, n the seacoast districts which were not visited until November 4th. These dates are from one to two weeks later than the ormal for the districts.

The precipitation record is largely a continuation of the rought conditions of 1930-31 until October, with the exceptions f January and March. Crops suffered accordingly. A change to more moist conditions came in October about the 5th, with eavy and excessive rains in that month and in November. Water supplies had been greatly replenished by the end of the ear. Up to the present, the climax of the long warm, dry eriod occurred during 1931 for the State of New Jersey, the nnual temperature for that year being the highest on record nd the amount of precipitation only slightly greater (though more concentrated on the crop-growing season) than that of the reat drought year of 1930. Snow did not occur to any considerable extent over the State as a whole until December. During the 17-18th of that month the State was blanketed with an average fall of seven inches. The total snowfall for the calendar year, while not up to the annual normal, is still greater than that of any of the past four years.

The most severe wind storms occurred on March 6th and November 9-10th. On the former date a storm of near-hurricane ntensity, at least so far as low pressure goes, moved along the Jersey coast with a low reading of 28.37 inches at Atlantic City nd 28.36 at Long Branch. The damage, while unestimated ut considered important, was not as great as the intensity of the orm would indicate. During November 9-10th, gales along he coast caused an estimated damage of between $300,000 and 400,000, mostly done by the force of pounding waves.

There was practically a complete absence of damage by hail.

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Average precipitation	Average snowfall
	Mean	Highest	Lowest		
1885	50.5	100	−2	37.87	......
1886	50.2	98	−10	46.54	......
1887	51.1	102	−6	47.66	......
1888	50.0	99	−12	52.20	......
1889	52.8	95	−3	**63.33**	......
1890	53.2	101	0	49.34	......
1891	53.2	102	1	47.98	......
1892	51.4	105	−6	42.04	......
1893	50.8	103	−21	47.90	......
1894	53.0	106	−11	47.37	......
1895	51.7	**109**	−12	37.29	25.7
1896	51.7	105	−15	42.51	39.5
1897	52.0	102	−6	51.72	25.8
1898	53.2	107	−15	52.35	34.3
1899	52.1	103	−21	45.84	44.3
1900	53.8	104	−9	42.71	23.3
1901	51.4	107	−8	51.80	14.1
1902	51.8	100	−11	59.44	40.1
1903	51.7	100	−16	56.25	22.3
1904	**49.3**	100	**−34**	43.78	48.5
1905	51.3	102	−18	42.06	32.9
1906	52.8	98	−15	46.38	23.4
1907	50.4	96	−22	51.65	54.1
1908	52.6	106	−17	42.58	35.3
1909	52.0	100	−15	40.86	29.9
1910	52.0	99	−15	39.73	33.3
1911	52.6	104	−12	50.36	30.0
1912	51.3	100	−32	46.61	35.1
1913	54.2	100	−11	46.99	5.2
1914	51.4	99	−12	39.23	41.1
1915	52.5	98	−3	47.37	39.4
1916	51.2	100	−18	38.17	49.6
1917	49.6	104	−21	40.80	40.4
1918	51.2	108	−16	37.65	25.3
1919	52.5	103	−12	52.10	10.9
1920	51.2	98	−17	51.87	33.4
1921	54.1	100	−5	38.16	23.0
1922	52.6	98	−11	41.57	30.8
1923	51.9	106	−14	40.38	39.8
1924	50.7	102	−6	44.17	24 3
1925	52.1	103	−20	42.15	26.8
1926	50.0	105	−11	44.41	32.2
1927	52.0	99	−12	49.68	13.7
1928	52.0	99	−15	46.22	21.5
1929	52.3	102	−9	42.96	16.0
1930	52.8	105	−14	**35.28**	15.6
1931	**54.4**	102	−9	37.07	8.6
1932	53.6	100	−6	46.80	16.3

MONTHLY STATE DATA FOR 1932

Month	Temperature				Precipitation					
	Mean	Departure from normal	Highest	Lowest	Average	Departure from normal	Greatest	Least	Snow	Greatest.
January	42.4	+12.4	76	17	4.50	+0.82	6.09	2.79	1.5	9.5
February	35.9	+6.1	69	4	2.16	−1.54	3.23	1.08	2.2	10.0
March	36.7	−1.9	69	3	5.49	+1.40	7.70	3.91	2.5	8.5
April	48.2	+0.2	78	27	3.45	−0.12	4.69	1.16	T.	2.5
May	60.5	+0.4	94	29	2.98	−0.65	5.61	1.60	0.0	0
June	69.3	+0.8	98	30	3.68	+0.02	6.59	1.83	0.0	0
July	73.8	+0.3	98	41	2.76	−1.87	5.54	0.82	0.0	0
August	73.5	+1.7	99	44	2.75	−2.02	7.49	1.00	0.0	0
September	66.4	+1.0	100	27	2.29	−1.32	4.60	0.94	0.0	0
October	56.2	+1.4	89	21	5.85	+2.18	9.64	3.53	0.0	0
November	42.0	−0.7	71	3	7.81	+4.53	12.66	3.92	T.	T.
December	36.0	+3.8	69	−6	3.03	−1.06	4.72	1.52	10.1	14.0
Year	53.6	+2.1	100	−6	46.80	+0.37	12.66	0.82	16.3	14.0

KILLING FROSTS

Stations	Last in spring	First in autumn
The Highlands and Kittatinny Valley		
Belvidere	Apr. 20*	Oct. 14
Charlotteburg	May 22*	Sept. 27*
Culvers Lake	do. 19	do. 26
Dover	Apr. 24*	Oct. 14
Layton	May 19	Sept. 26
Long Valley	....	do. 26
Newton	Apr. 28*	Oct. 14
Phillipsburg	do. 28*	do. 14
Sussex	do. 29	Sept. 26*
The Red Sandstone Plain		
Boonton	Apr. 29*	Sept. 26*
Canoe Brook	May 23*	do. 26*
Elizabeth	do. 18*	Oct. 14*
Flemington	Apr. 24	do. 14
Jersey City	do. 13*	Nov. 14*
Lambertville	do. 17	Oct. 14
Little Falls	do. 28	Sept. 26
New Brunswick	do. 16	Oct. 14
Paterson	....	do. 14
Plainfield	Apr. 16	do. 14
Ridgefield	do. 17*	do. 14
Somerville	do. 24	do. 14
The Southern Interior		
Belleplain	May 20*	Oct. 31
Bridgeton	Apr. 17	do. 31
Burlington	do. 17*	do. 14
Camden	do. 15*	do. 31
Clayton	do. 19*	....
Freehold	do. 19	Nov. 4
Hammonton	do. 24	Oct. 31
Hightstown	....	do. 13
Indian Mills	Apr. 24	do. 14
Lakewood	do. 24	do. 14
Moorestown	do. 17*	do. 14*
Pemberton	do. 17*	do. 31
Pleasantville	do. 20*	do. 15*
Runyon	May 23*	Sept. 26*
Trenton	Apr. 15	Nov. 4
Tuckerton	do. 16*	Oct. 31*
The Sea Coast		
Asbury Park	Apr. 17*	Nov. 14
Atlantic City	do. 17*	do. 14
Cape May City	do. 4*	....
Long Branch	do. 17	Oct. 29
Sandy Hook	Mar. 21	Nov. 14

* No frost reported; temperature 32° or below.

W. B. O. Philadelphia 4-10-33-1150

Climatological Data for the Year 1932

STATION	Counties	Elevation, feet	Temperature (degrees Fahrenheit)						Precipitation (inches)							Number days with .01 or more	Sky			Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall (unmelted)		Number clear days	Number partly cloudy days	Number cloudy days	
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	......	97	July 13	−2	Dec. 19	41	45.35	8.46	Oct.	0.94	Sept.	18.0	100	......	......	......	......
Charlotteburg	Passaic	719	40	50.7	94	Aug. 31†	−6	do. 19	40	50.84	10.41	Nov.	1.61	July	24.9	119	230	40	96	w.
Culvers Lake	Sussex	848	......	......	......	......	1	do. 17	31	43.79	7.59	do.	1.70	Sept.	37.0	99	195	78	93	nw.
Dover	Morris	600	48	51.2	94	Sept. 1	0	do. 19	48	47.68	9.40	do.	1.74	Apr.	20.4	114	83	166	117	......
Layton	Sussex	480	31	......	98	Sept. 1	−5	Dec. 19	31	46.10	7.80	Oct.	1.21	Sept.	24.8	100	131	56	179	w.
Long Valley	Morris	520	2	......	95	do. 1	−5	do. 19	2	43.15	9.26	Nov.	1.60	May	......	......	......	......	......	......
Newton	Sussex	769	49	51.4	97	July 20	2	do. 17	46	41.29	6.89	do.	1.66	Apr.	32.2	110	135	83	148	sw.
Phillipsburg	Warren	363	41	52.5	96	do. 13	0	do. 19	49	47.57	9.34	Oct.	1.11	Sept.	14.0	110	157	91	118	......
Sussex	Sussex	442	34	51.4	100	Sept. 1	−4	do. 19	37	51.00	7.49	Aug.	1.67	do.	25.3	102	178	62	126	......
Means and extremes	......	......	......	51.4	100	Sept. 1	−6	Dec. 19	......	46.31	10.41	Nov.	0.94	Sept.	24.6	108	159	82	125	w.
The Red Sandstone Plain.																				
Boonton	Morris	400	24	51.9	93	Aug. 31†	1	Dec. 19	42	44.93	10.01	Nov.	1.52	Dec.	......	100	171	27	168	nw.
Canoe Brook	Essex	173	2	51.2	94	Sept. 1†	−4	do. 21	2	48.31	11.36	do.	1.75	Aug.	......	100	183	81	102	nw.
Chatham	Morris	185	......	......	......	......	......	......	28	54.67	12.20	do.	1.66	do.	......	118	225	60	81	......
Elizabeth	Union	45	48	54.7	99	Aug. 2	5	Dec. 19	53	39.71	7.64	do.	1.35	July	12.0	114	214	63	89	nw.
Flemington	Hunterdon	140	35	53.9	98	Sept. 1	−3	Dec. 19	46	41.28	9.91	Nov.	1.01	Sept.	12.5	117	217	59	90	nw.
Jersey City	Hudson	10	34	54.8	93	do. 2	12	do. 16†	34	41.01	6.88	do.	0.82	July	14.2	116	131	129	106	nw.
Lambertville	Hunterdon	430	45	53.0	94	Aug. 31†	4	do. 19	45	44.53	8.55	do.	1.20	Sept.	17.3	127	202	57	107	nw.
Little Falls	Passaic	180	18	53.3	97	Sept. 2	1	do. 19	29	51.16	12.66	do.	1.69	July	10.0	111	196	72	98	nw.
New Brunswick	Middlesex	110	75	53.8	93	Sept. 1	3	Dec. 19	79	43.16	7.39	Nov.	1.49	July	13.1	109	178	110	78	w.
New Milford	Bergen	9	......	......	......	......	......	......	14	41.03	8.86	do.	1.35	Sept.	......	106	......	......	......	......
Paterson	Passaic	80	62	......	94	Sept. 2	9	Dec. 17	62	......	......	......	......	......	......	......	......	......	......	......
Plainfield	Union	120	41	53.0	94	July 13†	1	do. 19	44	47.00	9.38	Nov.	1.73	July	15.2	107	130	122	114	nw.
Ridgefield	Bergen	80	15	53.0	96	Sept. 2	9	Dec. 19	15	44.95	8.25	Nov.	1.95	Apr.†	14.3	111	141	108	117	nw.
Somerville	Somerset	70	48	53.3	97	July 1	−6	do. 19	9	42.96	8.31	do.	1.79	Feb.	12.8	110	155	61	150	nw.
Woodcliff Lake	Bergen	100	......	......	......	......	......	......	14	41.15	9.48	do.	1.24	July	......	100	......	......	......	......
New York, N. Y.	......	314	62	54.2	92	Sept. 2	12	Nov. 27	62	38.85	5.87	Nov.	0.85	July	13.3	116	110	131	125	nw.
Means and extremes	......	......	......	53.3	99	Aug. 2	−6	Dec. 19	......	44.70	12.66	Nov.	0.82	July	13.5	110	179	78	109	nw.
The Southern Interior.																				
Belleplain	Cape May	30	37	54.2	93	Aug. 31	−3	Dec. 19	38	47.55	6.53	Oct.	2.23	Aug.	8.0	...	93	82	191	nw.
Bridgeton	Cumberland	30	44	55.1	94	June 26†	7	do. 19†	49	46.62	7.02	Mar.	1.24	Sept.	15.0	104	220	52	94	sw.
Burlington	Burlington	12	20	56.2	96	Aug. 6	4	do. 21	46	53.45	7.18	Nov	1.80	Feb.	10.9	113	172	101	93	nw.
Camden	Camden	20	1	55.2	98	July 1	2	do. 19	......	......	......	......	......	......	......	......	......	......	......	......
Freehold	Monmouth	194	1	54.0	94	do. 13	7	do. 19	28	47.78	7.72	Nov.	1.31	Feb.	14.1	111	201	55	100	w.
Hammonton	Atlantic	80	2	54.2	97	Aug. 31	−1	Dec. 21	26	48.79	7.18	Nov.	1.60	Feb.	13.4	112	212	77	77	w.
Hightstown	Mercer	146	38	......	......	......	1	do. 21	39	41.02	6.96	do.	1.41	do.	......	......	......	......	......	......
Indian Mills	Burlington	76	43	54.5	96	June 26	0	do. 19	42	52.24	8.26	do.	1.70	do.	19.7	100	146	121	99	sw.
Lakewood	Ocean	54	28	53.8	95	July 13	2	do. 21	28	45.06	7.70	Mar,	1.36	do.	15.9	112	190	60	116	nw.
Moorestown	Burlington	75	69	53.6	93	June 26†	2	do. 21	69	45.65	8.15	Nov.	1.60	do.	18.6	109	190	63	113	nw.
Northfield	Atlantic	25	......	......	......	......	......	......	25	49.47	5.61	May	1.64	Sept.	15.4	108	......	......	......	......
Pemberton	Burlington	55	2	54.9	96	July 14	1	Dec. 19	2	45.74	6.75	Nov.	1.45	Feb.	14.4	114	172	66	128	w.
Pleasantville	Atlantic	11	9	53.8	98	Aug. 31	−1	do 19	34	51.01	6.08	Mar.	2.09	Aug.	......	113	225	59	82	s.
Runyon	Middlesex	18	8	52.1	97	do. 23†	−10	do. 19	9	47.75	8.83	Nov.	1.67	Aug.	......	90	220	93	53	w.
Trenton	Mercer	190	60	54.4	94	do. 31	9	do. 17	60	47.25	7.53	do.	1.51	Feb.	12.5	123	114	119	133	nw.
Trenton No. 2	Mercer	105	...	......	......	......	......	......	4	51.08	8.46	do.	1.56	do.	16.5	120	......	......	......	......
Tuckerton	Ocean	23	34	55.4	95	June 6†	10	Mar. 15†	39	46.70	6.09	Jan.	1.08	do.	9.7	117	130	107	129	sw.
Philadelphia, Pa.	......	114	61	57.1	97	Sept. 1	15	Dec. 16	61	44.52	7.45	Nov.	1.05	Sept.	16.0	116	110	122	134	nw.
Means and extremes	......	......	......	54.4	98	July 1†	−10	Dec, 19	......	47.82	8.83	Nov.	1.08	Feb.	14.2	110	176	81	109	nw.
The Sea Coast.																				
Asbury Park	Monmouth	22	42	54.1	90	June 27†	14	Mar. 10†	43	40.40	6.77	Nov.	1.55	Feb.	15.0	117	269	48	49	nw.
Atlantic City	Atlantic	16	59	55.0	90	July 11	15	Dec. 16	59	46.58	5.81	Mar.	1.75	Sept.	12.1	114	113	110	143	w
Long Branch	Monmouth	25	24	52.8	93	June 27	7	do. 21	24	46.17	8.22	Nov.	1.17	Aug.	15.7	123	159	99	108	nw.
Sandy Hook	Monmouth	22	34	54.3	89	Aug. 8	14	do. 17	34	36.10	5.60	Mar.	0.93	July	11.6	121	129	110	127	w.
Means and extremes	......	......	......	54.0	93	June 27	7	Dec. 21	......	42.31	8.22	Nov.	0.93	July	13.6	119	167	92	107	w.
For the State	......	......	......	53.6	100	Sept 1	−10	Dec. 19	......	46.80	12.66	Nov.	0.82	July	16.3	111	169	95	112	nw.

† Also on other dates.

Monthly and Annual Precipitation for the Year 1932, with Departures from the Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
he Highlands and Kittatinny Valley.																										
elvidere	4.16	+0.62	2.44	−1.54	4.42	+0.57	1.87	−1.79	3.81	−0.02	3.25	−0.75	3.29	−1.69	3.05	−1.56	0.94	−2.83	8.46	+4.79	7.21	+3.97	2.45	−1.62	45.35	−1.85
harlotteburg	4.35	+0.80	3.32	−0.84	4.49	+0.29	2.34	−1.98	2.29	−1.91	3.14	−0.98	1.61	−3.22	2.17	−2.45	4.46	+0.04	9.64	+5.17	10.41	+6.89	2.62	−1.71	50.84	+0.10
ulvers Lake	3.49	+0.31	3.23	+0.06	3.97	+0.50	1.77	−2.05	2.65	−0.98	5.26	+0.65	2.01	−2.56	3.63	−0.79	1.70	−2.84	6.72	+2.54	7.59	+4.79	1.77	−1.89	43.79	−2.26
over	4.61	+0.22	2.69	−1.48	5.52	+1.53	1.74	−2.02	1.82	−2.12	3.74	−0.29	2.80	−2.47	2.50	−2.26	3.19	−0.90	7.08	+3.01	9.40	+5.76	2.59	−1.71	47.68	−2.73
ayton	4.55	+1.66	3.05	+0.21	4.22	+0.85	1.51	−2.10	3.40	+0.15	4.98	+1.19	2.62	−1.64	3.45	−0.45	1.21	−2.71	7.80	+4.18	7.53	+5.04	1.78	−2.16	46.10	+4.22
ong Valley	*4.07	......	*2.28	......	*5.26	......	*2.05	......	1.60	......	3.51	......	2.87	......	1.72	......	2.17	......	6.23	......	9.26	......	2.13	......	43.15	......
ewton	2.79	−0.82	2.92	−0.77	5.00	+1.43	1.66	−1.71	2.23	−1.70	3.26	−0.72	3.50	−1.46	1.94	−2.48	3.66	−0.15	5.63	+2.00	6.89	+3.76	1.81	−1.90	41.29	−4.52
hillipsburg	3.74	+0.14	1.56	−2.21	4.96	+1.42	1.16	−2.10	3.46	−0.40	3.50	−0.13	3.75	−1.10	4.31	−0.31	1.11	−2.55	9.34	+5.78	7.76	+4.56	2.92	−0.82	47.57	+2.28
ussex	4.25	+0.77	2.59	−0.91	4.08	+0.49	3.13	−0.31	2.97	−0.75	6.59	+2.91	5.54	+1.14	7.49	+3.23	1.67	−2.23	4.81	+1.37	6.05	+2.80	1.83	−1.73	51.00	+6 78
The Red Sandstone Plain.																										
oonton	4.28	+0.45	2.35	−1.76	4.37	+0.43	2.49	−1.50	2.22	−1.84	3.73	+0.06	2.08	−2.82	1.89	−3.19	3.01	−1.12	6.98	+3.07	10.01	+6.44	1.52	−2.46	44.93	−4.24
anoe Brook	4.61	......	2.12	......	5.23	......	2.77	......	2.38	......	2.89	......	2.65	......	1.75	......	2.74	......	7.37	......	11.36	......	2.44	......	48.31	......
hatham	5.05	+1.36	2.92	−0.63	6.17	+2.43	3.64	−0.46	3.58	+0.08	3.00	−1 06	2.79	−1.65	1.66	−2.75	3.37	−0.92	6.89	+2.68	12 20	+9.30	3.40	−0.77	54.67	+7.61
lizabeth	4.56	+0.52	2.26	−2.06	4.87	+0.65	3.01	−0.67	1.38	−2.44	3.26	−0.36	1.35	−3.81	3.01	−1.28	2.05	−1.72	4.68	+0.79	7.64	+4.39	1.64	−2.32	39.71	−8.31
lemington	3.99	+0.30	2.17	−1.50	4.85	+0.96	2.30	−1.22	3.17	−0.85	1.83	−2.01	1.93	−3.29	2.76	−1.95	1.01	−2.89	4.61	+0.95	9.91	+6.79	2.75	−1.01	41.28	−2.43
rsey City	4.38	+0.88	2.42	−1.43	5.38	+1.23	3.10	−1.06	1.90	−1.68	3 89	+0.39	0.82	−3.62	2.84	−1.69	1.54	−1.81	5.21	+1.53	6.88	+3.69	2.65	−1.28	41.01	−4.85
ambertville	4.34	+0.69	1.43	−2.17	4.92	+0.89	2.40	−1.18	4.03	+0.01	3.37	−0.54	2.41	−2.41	3.86	−0.80	1.20	−2.69	5.12	+1.64	8.55	+5.34	2.90	−0.97	44.53	−2.19
ittle Falls	4.27	+0.57	2.77	−0.82	4.77	+1.18	3.42	−0.70	2.76	−1.03	3.13	−0.39	1.69	−2.70	1.98	−2.42	2.22	−1.36	9.33	+4.82	12.66	+9.76	2.16	−1.93	51.16	+4.98
ew Brunswick	4.45	+0.66	1.68	−2.07	5.42	+1.61	1.97	−1.77	2.09	−1.80	4.07	+0.31	1.49	−3.55	3.46	−1.69	3.46	−0.14	4.93	+1.35	7.39	+3.91	2.75	−0.92	43.16	−4.10
ew Milford	4.28	......	2.91	......	4.71	......	2.85	......	2.19	......	2.77	......	1.64	......	2.23	......	1.35	......	5.08	......	8.86	......	2.16	......	41.03	......
aterson	......	......	......	......	......	......	......	......	......	......	3.25	−0.87	1.48	−3.54	2.29	−2.44	1.33	−2.80	5.43	+1.34	9.59	+6.42	2.76	−1.30	......	......
ainfield	5.15	+1.13	2.56	−1.54	4.97	+0.70	3.02	−0.88	2.13	−1.79	3.72	−0.02	1.73	−4.10	2.75	−2.46	2.70	−1.67	6.36	+2.21	9.38	+6.01	2.53	−1.53	47.00	−3.94
idgefield	3.92	......	2.95	......	4 75	......	1.95	......	2.85	......	3.38	......	2.88	......	2.96	......	1.95	......	6.56	......	8.25	......	2.55	......	44.95	......
omerville	3.76	+0.04	1.79	−2.12	5.23	+1.27	1.86	−1.63	2.22	−1.63	2.07	−1.67	3.07	−2.04	3.84	−1.00	2.87	−0.78	5.42	+1.99	8.31	+5.27	2.51	−1.34	42.96	−3.64
erona	5.08	......	......	......	5.38	......	......	......	2.25	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
oodcliff Lake	5.00	......	2.63	......	3.91	......	2.57	......	2.06	......	2.57	......	1.24	......	2.31	......	1.54	......	5.80	......	9.48	......	2.04	......	41.15	......
ew York, N. Y	4.23	+0.57	2.38	−1.44	5.52	+1.88	2.69	−0.54	1.81	−1.43	3.57	+0.24	0.85	−3.39	2.72	−1.61	1.56	−1.83	5.03	+1.50	5.87	+2.91	2.62	−1.00	38.85	−4.14
he Southern Interior.																										
lleplain	3.86	+0.33	2.63	−1.09	*5.80	+2.10	2.60	−1.05	*4.50	+0.68	*3.99	+0.77	*4.14	+0.03	2.23	−2.07	3.00	−0.39	6.53	+3.11	4.81	+2.20	3.46	−0.49	47.55	+4.13
idgeton	5.33	+1.81	2.45	−1.41	7.02	+2.84	2.06	−1.46	4.33	+0.49	3.19	−0.54	3.67	−0.82	2.34	−2.25	1.24	−2.07	5.59	+2.00	5.35	+2.55	4.05	+0.23	46.62	+1.37
rlington	4.84	+1.44	1.80	−1.82	6.95	+3 24	2.36	−1.34	2.91	−1.30	5.66	+1.78	3.45	−1.29	5.31	−0.14	3.65	+0.14	5.55	+1.90	7.18	+4.07	3.79	−0.53	53.45	+7.44
mden	......	......	......	......	......	......	......	......	......	......	2.86	......	2.19	......	2.39	......	1.41	......	4.42	......	6.61	......	3.05	......	......	......
ayton	......	......	......	......	......	......	1.54	−1.94	3.51	+0.18	......	......	2.34	−2.51	......	......	......	......	......	......	......	......	......	......	......	......
eehold	5.15	+1.19	1.31	−2.85	6.03	+1.38	3.14	−0.50	3.06	−0.78	3.81	+0.18	3.71	−1.41	1.40	−3.31	2.27	−2.02	5.95	+2.43	7.72	+3.70	4.23	+0.51	47.78	−1.48
ammonton	4.88	+1.09	1.60	−1.93	7.30	+3.71	2.67	−1.25	2.67	−1.61	4.42	+0.90	4.74	+0.03	1.98	−2.00	2.55	−0 64	5.99	+2.44	7.18	+3.86	2.81	−0.79	48.79	+3.81
ghtstown	3.44	+0.17	1.41	−2.32	5.35	+1.31	*2.70	−1.21	*3.07	−0.88	*2.65	−0.95	*3 67	−1.32	2.27	−2.31	2.79	−0.20	4.65	+0.94	6.96	+3.65	2.06	−1.63	41.02	−4.75
dian Mills	5.11	+1.29	1.70	−1.87	7.35	+3.32	3.69	+0.26	3.14	−0.10	4.36	+0.23	3.22	−1.44	2.87	−3.06	2.72	−1.19	6.29	+2.85	8.26	+5.18	3.53	−0.87	52.24	+4.60
kewood	5.86	+2.18	1.36	−2.34	7.70	+3.72	3.99	+0.32	3.61	+0.21	3.29	−0.42	1.80	−3.05	2.01	−4.04	2.18	−0.61	4.41	+0.82	6.20	+3.74	2.65	−1.99	45.06	+0.88
orestown	3.62	+0.16	1.60	−2.00	7.47	+3.71	3.30	+0.01	3.65	−0.37	2.82	−0.90	2.78	−1.90	2.47	−2.42	2.53	−1.10	4.40	+0.83	8.15	+4.90	2.86	−0.83	45.65	+0.08
rthfield	4.84	+1.31	2.21	−0.68	5.44	+1.95	3.58	+0.12	5.61	+2.14	4.94	+1.27	4.75	+1.15	2.73	−1.62	1.64	−0.86	4 79	+2.01	5.13	+2.75	3.81	−0.31	49.47	+9.23
mberton	4.10	......	1.45	......	5.47	......	2.89	......	2.74	......	4.28	......	3.22	......	3.39	......	3.12	......	5.66	......	6.75	......	2.67	......	45.74	......
easantville	5.25	+2.09	2.29	−0.62	6.08	+2.61	4.31	+0.96	4.35	+1.09	4.76	+0.83	4.75	+0.77	2.09	−2.84	2.51	−0.61	4.93	+1.49	5.57	+2.85	4.12	−0.12	51.01	+8.50
rt Norris	......	......	......	......	5.84	......	1.80	......	4.57	......	3.63	......	3.22	......	4.06	......	1.62	......	5.63	......	6.45	......	3.85	......	......	......
nyon	5.36	......	1.90	......	6.27	......	2.41	......	2.98	......	4.95	......	2.24	......	1.67	......	3.07	......	5.28	......	8.83	......	2.79	......	47.75	......
enton	4.18	+0.87	1.51	−1.90	5.59	+2.19	2.25	−0.69	3.08	0.0	3 49	+0.40	3.63	−0.31	5.55	+0.80	2.70	−0.70	4.69	+1.91	7.53	+4.80	3.05	−0.30	47.25	+7.07
enton No. 2	4.66	......	1.56	......	5.88	......	3.06	......	3.50	......	3.19	......	3.61	......	3.58	......	4.60	......	5.86	......	8.46	......	3.12	......	51.08	......
ckerton	6.09	+2.46	1.08	−2.71	6.07	+1.82	3.83	+0.09	3.76	+0.02	3.52	−0.31	3.46	−0.42	1.47	−4.07	2.18	−0.88	5.56	+2.03	4.96	+1.88	4.72	+0.21	46.70	+0.12
iladelphia, Pa	4.69	+1.39	1.58	−1.85	7.43	+4.04	2.37	−0.68	3.81	+0.55	3.39	+0.15	2.25	−1.90	3.07	−1.55	1.05	−2.09	4.30	+1.49	7.45	+4.75	3.13	−0.30	44.52	+4.00
The Sea Coast.																										
bury Park	4.77	+1.20	1.55	−2.07	4.65	+0.42	3.35	−0.34	2.30	−1.28	3.39	−0.23	1.88	−2.66	1.96	−3.10	1.88	−1.11	3.53	−0.18	6.77	+3.85	4.37	+0.52	40.40	−4.98
lantic City	5.13	+1.64	2.28	−1.20	5.81	+2.21	4.31	+1.32	4.08	+1.03	3.74	+0.70	4.21	+0.28	2.68	−1.81	1.75	−0.90	4.63	+1.43	3.92	+1.10	4.04	+0.10	46.58	+5.90
pe May City	4.81	+1.44	2.77	−0.64	4.66	+0.93	2.63	−0.36	3.75	+0.76	3.33	+0.29	......	......	......	......	......	......	......	......	......	......	......	......	......	......
ng Branch	4.18	0.0	2.04	−2.01	7.13	+2.79	4.69	+0.14	2.90	−0.86	3.93	+0.13	1.74	+3.18	1.17	−4.96	1.92	−1.14	5.12	+1.04	8.22	+4.70	3.13	−1.61	46.17	−4.93
ndy Hook	3.43	−0.53	1.61	−2.29	5.60	+1.56	2.27	−1.35	2.79	−0.93	3.55	−0.23	0.93	−4.19	1.00	−3.98	2.28	−1.15	4.05	+0.27	5.58	+2.33	3.01	−1.03	36.10	−11.52

* Interpolated from surrounding stations.

Monthly and Annual Mean Temperatures for the Year 1932, with Departures from the Normal

STATIONS.	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	[f]40.4	+13.1	.....	.....	[c]36.2	−1.9	48.8	−1.0	61.9	+1.2	[c]70.6	+1.8	[a]74.4	+1.2	[a]74.0	+3.0	67.3	+2.6	55.1	+1.3	40.4	−0.7	[a]33.2	+2.6	.....	.....
Charlotteburg	38.9	+12.0	32.8	+7.2	33.8	−2.0	46.0	−0.8	59.4	+1.9	66.0	+1.2	70.8	+0.8	70.6	+2.7	63.8	+1.9	53.5	+1.9	[c]38.3	−1.8	34.0	+4.2	50.7	+2.4
Dover	38.8	+12.2	32 3	+6.1	34.5	−0.7	46.2	−1.2	[a]60.6	+2.0	[e]68.3	+1.6	[a]72.0	+0.6	71.8	+2.7	63.2	+1.0	53.4	+2.1	[a]39.0	−1.1	33.8	+3.9	51.2	+2.4
Layton	35.5	+10.8	.....	.....	[e]33.4	−2.2	44.5	−2.7	58.0	0.0	65.5	0.0	70.1	−0.8	70.8	+2.4	62.4	+0.1	52.6	+1.1	37.5	−1.3	31.0	+3.6	.....	.....
Long Valley	.....	.....	.....	.....	.....	.....	.....	.....	59.3	.....	66.5	.....	71.0	.....	70.6	.....	63.4	.....	53.8	.....	39.5	.....	33.4	.....	.....	.....
Newton	37.8	+12.1	31.7	+5.2	33.0	−2.5	45.8	−2.2	[b]61.0	+1.5	68.6	+0.6	73.4	+0.9	72.9	+2.5	64.6	+1.1	53.3	+0.6	38.8	−1.7	35.3	+5.2	51.4	+1.9
Phillipsburg	40.7	+12.6	34.8	+6.9	36.3	−1.8	48.6	−1.3	61.6	+0.3	69.0	−0.3	73.8	−0.3	72.8	+1.0	65.6	+0.4	55.2	+1.3	39.8	−1.4	32.1	+0.8	52.5	+1.5
Sussex	38.3	+11.7	32.2	+6.8	33.9	−2.4	46.3	−2.3	[b]61.6	+1.7	68.8	+2.0	[a]73.2	+1.1	[a]72.8	+3.3	66.0	+1.8	[b]54.7	+1.5	37.8	−3.3	31.2	+1.3	51.4	+1.9
The Red Sandstone Plain.																										
Boonton	40.2	+12.9	33.1	+6.0	36.0	−0.6	47.4	−1.3	60.2	+1.0	67.7	+0.1	72.4	−0.1	72.0	+0.7	65.0	+1.4	55.4	+2.6	39.2	−2.2	34.0	+3.5	51.9	+2.0
Canoe Brook	40.4	.....	33.1	.....	34.8	.....	46.4	.....	58.8	.....	66.6	.....	70.5	.....	70.8	.....	64.1	.....	55.6	.....	39.6	.....	33.2	.....	51.2	.....
Elizabeth	43.2	+13.0	36.3	+5.8	38.4	−0.4	50.2	−0.6	62.4	+0.4	[a]70.6	+0.1	[d]75.6	+0.3	75.3	+1.9	[a]67.7	+1.0	57.2	+1.8	42.6	−0.9	36.8	+3.5	54.7	+2.2
Flemington	42.0	+12.2	35.4	+6.6	36.6	−3.5	47.5	−2.9	61.4	+0.1	70.0	+0.8	75.2	+0.6	75.0	+2.5	67.9	+1.6	57.5	+1.5	42.4	−0.5	35.4	+3.4	53.9	+1.9
Jersey City	43.0	+10.8	36.2	+5.6	37.2	−2.0	49.2	−0.8	62.2	+0.6	70.7	−0.2	75.4	−0.7	76.4	+2.3	68.3	+1.1	57.5	+1.2	43.6	−0.4	38.4	+4.3	54.8	+1.8
Lambertville	41.9	+11.4	35.1	+4.7	35.7	−3.7	48.4	−2.3	60.6	−1.0	69.0	−0.7	72.7	−1.6	73.8	+1.4	66.8	+1.0	55.5	+0.9	41.6	−1.6	35.4	+1.8	53.0	+0.9
Little Falls	41.6	+13.6	34.0	+4.4	36.6	−1.4	48.4	−1.5	61.9	+2.2	69.5	+1.5	73.9	+0.1	73.4	+0.2	67.1	+3.0	56.6	+1.7	41.7	−0.5	35.4	+3.9	53.3	+2.3
New Brunswick	43.0	+12.8	35.6	+4.8	37.0	−1.8	49.3	−0.3	61.0	+0.6	69.6	+0.5	74.4	+0.4	74.3	+2.2	66.7	+1.1	56.4	+1.6	42.6	−0.8	35.9	+2.7	53.8	+2.0
Paterson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.2	+0.4	75.6	+1.2	74.2	+2.0	67.5	+1.3	56.6	+1.4	42.4	−1.1	37.0	+3.9	.....	.....
Plainfield	41.6	+11.6	34.7	+6.0	36.2	−2.6	47.9	−1.7	60.8	+0.6	69.2	+0.6	73.6	−0.4	73.7	+1.9	66.1	+0.5	55.7	+1.5	41.1	−1.4	34.8	+2.1	53.0	+1.6
Ridgefield	40.9	.....	34.4	.....	36.2	.....	47.8	.....	61.0	.....	68.8	.....	73.8	.....	73.8	.....	66.6	.....	56.2	.....	40.5	.....	35.7	.....	53.0	.....
Somerville	42.0	+13.2	35.4	+6.5	36.6	−1.6	48.3	−1.2	60.4	−0.4	70.0	+0.9	74.7	+0.6	[b]73.8	+1.4	[a]66.6	+0.6	56.2	+1.9	41.3	−1.1	34.2	+2.0	53.3	+1.9
Verona	39.6	.....	.....	.....	34.3	.....	.....	.....	60.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York, N. Y.	42.8	+11.9	36.0	+4.7	37.0	−0.7	48.4	−1.0	60.9	+0.3	69.0	+0.2	73.9	+0.1	74.9	+1.8	67.7	+0.9	57.6	+1.3	43.7	−0.5	39.0	+4.0	54.2	+1.9
The Southern Interior.																										
Belleplain	45.0	+12.0	[a]38.5	+7.0	[b]38.1	−3.0	[b]48.5	−2.1	[e]59.8	−1.3	[f]69.2	+0.5	[b]73.0	−0.8	72.8	+0.2	66.0	−0.5	[a]56.7	+0.4	44.0	−0.5	38.4	+3.3	54.2	+1.3
Bridgeton	44.4	+10.7	38.5	+4.8	37.9	−4.4	50.3	−2.4	61.7	−2.3	71.2	−0.9	75.8	−0.9	74.9	−0.1	68.0	−0.2	56.6	−0.8	43.6	−2.0	37.9	+1.7	55.1	+0.3
Burlington	45.2	+12.9	38.2	+6 9	39.2	−1.2	50.9	−0.9	63.6	+1.7	71.8	+2.1	72.2	+2.2	77.0	+2.8	68.7	+1.9	59.6	+1.4	45.0	+0.6	37.4	+3.6	56.2	+2.8
Camden	43.6	.....	37.2	.....	37.6	.....	50.2	.....	62.6	.....	72.2	.....	76.8	.....	76.0	.....	68.8	.....	57.8	.....	43.4	.....	36.8	.....	55.2	.....
Clayton	.....	.....	.....	.....	.....	.....	49.1	−2.1	61.8	+0.1	.....	.....	[a]75.6	+0.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Freehold	43.5	.....	36.3	.....	36.8	.....	49.4		60.6	.....	70.1	.....	74.4	.....	73.7	.....	66.7	.....	56.6	.....	43.1	.....	37.3	.....	54.0	.....
Hammonton	44.6	.....	37.4	.....	37.8	.....	49.0	.....	61.6	.....	70.8	.....	73.5	.....	[a]73.1	.....	66.3	.....	56.2	.....	42.8	.....	37.0	.....	54.2	.....
Hightstown	44.0	+14.3	39.2	+9.8	38.4	−2.0	.....	.....	.....	.....	.....	.....	.....	.....	74.0	−1.7	67.3	+0.5	57.2	+2.0	43.0	−0.3	[b]36.4	+3.8	.....	.....
Indian Mills	44.8	+12.9	37.8	+6.0	38.0	−2.5	49.8	−0.5	61.8	−0.3	70.4	+0.6	73.5	−1.2	73.2	+0.6	66.4	+0.3	57.0	+1.5	43.5	+0.6	37.8	+4.0	54.5	+1.8
Lakewood	44.4	+13.1	36.7	+7.0	37.2	−2.4	49.0	−0.4	60.9	+0.7	69.8	+2.3	74.2	+1.4	72.3	+1.2	65.2	+0.6	55.7	+0.6	43.0	+0.2	37.5	+4.0	53.8	+2.4
Moorestown	42.8	+12.1	36.0	+4.7	36.5	−2.7	48.6	−1.8	60.3	−1.0	69.8	−0.2	74.2	−0.5	73.8	+1.2	67.1	+1.1	55.9	+1.2	42.0	+1.2	36.4	+2.9	53.6	+1.5
Pemberton	44.8	.....	37.8	.....	38.1	.....	50.3	.....	61.8	.....	70.8	.....	75.4	.....	74.4	.....	67.3	.....	57.1	.....	44.0	.....	37.4	.....	54.9	.....
Pleasantville	44.4	.....	36.9	.....	37.2	.....	48.6	.....	58.4	.....	69.2	.....	73.2	.....	72.8	.....	65.9	.....	57.4	.....	44.1	.....	37.0	.....	53.8	.....
Runyon	41.7	.....	33.5	.....	36.2	.....	48.2	.....	59.2	.....	68.0	.....	72.6	.....	73.0	.....	63.8	.....	54.4	.....	41.6	.....	[a]32.8	.....	52.1	.....
Trenton	43.4	+12.9	36.8	+6.1	36.8	−2.3	49.2	−0.6	61.0	−0.1	70.3	+0.8	74.6	+0.1	75.4	+2.4	67.6	+0.7	57.0	+1.4	43.0	−1.4	37.4	+3.0	54.4	+1.9
Tuckerton	47.5	+14.9	40.1	+9.3	39.4	−0.6	48.6	−0.7	59.2	−0.7	70.6	+2.2	74.0	−0.1	72.0	−0.7	67.2	+1.0	59.2	+3.1	45.5	+1.4	41.4	+7.0	55.4	+3.0
Philadelphia, Pa.	46.2	+13.6	39.6	+5.7	39.4	−1.4	52.0	−0.1	63.4	+0.5	72.6	+1.2	77.3	+1.1	77.7	+2.9	70.8	+2.8	59.6	+1.8	45.8	+0.1	40.4	+4.1	57.1	+2.7
The Sea Coast.																										
Asbury Park	44.6	+12.4	37.4	+6.0	38.3	−0.7	48.8	+0.3	57.8	−1.0	67.4	0.0	73.4	+1.0	72.8	+1.0	67.3	+0.5	57.2	+1.4	44 8	0.0	39.4	+4.4	54.1	+2.1
Atlantic City	45.3	+12.8	39 0	+5.4	38.2	−0.4	49.0	+1.2	57.8	−0.3	68.5	+1.9	73.6	+1.5	74.5	+2.0	68.2	+1.4	58.8	+1.9	46.4	+0.8	41.2	+4.8	55.0	+2.7
Cape May City	45.2	+11.1	40.0	+5.9	39.2	−1.6	50.0	+1.6	59.4	+0.8	[b]69.0	+1.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Long Branch	42.1	+10.5	34.4	+4.0	36.0	−2.5	45.0	−3.1	58.8	+0.6	68.4	+2.2	73.8	+1.7	73.2	+2.2	65.8	−0.1	55.9	−0.4	42.2	−2.0	37.8	+3.7	52.8	+1.4
Sandy Hook	43.2	+12.4	36.4	+5.8	37.4	+0.4	48.1	+1.1	59.8	+1.3	68.6	+0.8	74.4	+0.7	75.2	+2.4	68 2	+1.1	58.0	+1.0	44.3	−0.3	38.4	+4.0	54.3	+2.6

Reference letters, as a, b, c., in table indicate number of days missing; for example, b represents 2 days.

THE WEATHER BY MONTHS.

JANUARY: The warmest January on record, exceeding the average temperature of the previous warmest, which occurred in 1890, by 1.1 degree; very little snow. FEBRUARY: Continued mild; precipitation light with about as little snow as ever occurs in February; the winter now closed ranks as the second warmest on record, last winter being the warmest. MARCH: Cold, with the precipitation much above normal; severe coast storm on the 6th with a barometer reading of 28.37 inches at Atlantic City. APRIL: The temperature was nearly normal, and the rainfall about three-quarters of normal; rather windy but no destructive gales. MAY: Nearly normal in both temperature and rainfall, except that in the latter connection the northern portion experienced a deficiency; generally free from frost except in the extreme north. JUNE: Both the temperature and rainfall were practically normal; growing conditions favorable. JULY: Dry, with the average rainfall only 60% of normal; soil too dry with steady deterioration of pastures and crops toward end of month; temperature above normal. AUGUST: Warm and dry, with the rainfall only a little more than one-half of the normal amount, and crops suffered from lack of moisture. SEPTEMBER: Dry weather continued with the rainfall about two-thirds of normal; temperature normal, with the first killing frost reported from a few stations in the extreme north. OCTOBER: Wet, with the average rainfall one and one-half times the normal; temperature ranged evenly a little above normal; the first killing frosts occurred at about normal dates in the north portion and later than normal in the south. NOVEMBER: Very wet, with the state average the second largest on record for November; the first cold wave came on the 27th; destructive gales on the coast during the 9-10th. DECEMBER: Warmer than usual and with precipitation below normal; considerably more snow than in any December of the past 14 years.

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CLIMATOLOGICAL DATA.

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NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVIII. JANUARY, 1933. No. 1.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month was the third warmest January on record. January of last year was the warmest with an average of 42.4 degrees, with January of 1890 the second warmest, 41.3 degrees, while the month just passed was next with an average of 38.5 degrees. Practically the entire month was above the normal, only the 1st and 13th being generally below it. The climax of the mild weather occurred during the period from the 19th to 23d inclusive, the highest temperatures for the month being recorded on the 23d at the majority of the stations; these were mostly in the fifties and low sixties. The lowest temperatures were observed almost wholly on New Years Day, and ranged between two and fifteen degrees above zero.

Rain fell rather frequently but in generally light amounts, and there was practically no snow except in the Highlands where the monthly fall varied between two and ten inches. Most of this snow occurred on the 9th, and at the end of the month the ground was bare over almost the entire State. The average precipitation was two-thirds of the normal for the State as a whole, ranging from 47% in the Red Sandstone Plain to 86% over the Southern Interior. The only moderately heavy rains that occurred were on the 9th and 26th.

Two storms coming in quick succession during the 26-28th caused northeast gales. Most of the damage done was due to flooding, particularly in the Delaware Bay section where storm tides rendered a thousand people homeless. The amount of damage is at present unestimated.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 38.5°, which was 7.6° above normal. The highest temperature was 67° at Elizabeth on the 23d, and the lowest, 2°, at Culvers Lake on the 1st. The greatest daily range of temperature was 44° at Runyon on the 24th. The highest monthly mean temperature was 43.6° at Tuckerton, and the lowest, 33.4° at Layton.

The temperature departure from the normal for the year, 1933, by sections, is: The Highlands, +8.7°; Red Sandstone Plain, +8.7°; Southern Interior, +8.7°; Sea Coast, +9.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 2.39 inches, which was 1.18 inches below normal. The average total snowfall at 20 selected stations was 1.2 inches. The greatest monthly precipitation was 4.45 inches, at Port Norris, and the least, 1.38 inches at Elizabeth. The greatest amount of precipitation in any 24 consecutive hours was 2.80 inches at Port Norris on the 25-26th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1933, to date by sections, is: The Highlands, —1.53 inch; Red Sandstone Plain, —2.01 inches; Southern Interior, —0.48 inches; Sea Coast, —1.32 inches.

WIND.

The prevailing wind direction was from the Northwest. The wind movement averaged 14 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 65 miles per hour from the Northeast at Atlantic City on the 26th.

MISCELLANEOUS.

The per cent of possible sunshine was 60, or 10 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.03 inches, or 0.08 inch below normal. The highest reading was 30.65 inches at Ridgefield and Trenton on the 1st and 13th respectively, and the lowest 29.25 inches at Atlantic City on the 26th.

The mean stage of the Delaware River at Phillipsburg was 2.8 feet, and the highest 5.0 feet on the 25th. The mean stage at Trenton was 2.1 feet, and the highest 3.0 feet on the 26th.

Dense fog occurred on the following dates: 4, 14, 19, 22, 23, and 27. A thunderstorm was recorded at Plainfield on the 11th. Sleet in light amounts were noted on the 9th, 21st, 26th, 27th and 28th in scattered sections of the State.

COMPARATIVE DATA FOR JANUARY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	30.8	−0.1	67	0	4.08	+0.51	5.41	3.33	......	......	......	......	......
1886	27.3	−3.6	60	−10	4.47	+0.90	5.59	3.08	......	......	......	......	......
1887	28.4	−2.5	67	−6	3.86	+0.29	6.65	2.00	......	10	......	......	12
1888	25.4	−5.5	59	−12	4.77	+1.20	6.74	2.80	......	9	......	......	12
1889	36.2	+5.3	60	8	5.68	+2.11	8.78	3.84	......	9	......	......	9
1890	41.3	+10.4	78	12	2.29	−1.28	3.22	1.05	......	10	......	......	11
1891	34.2	+3.3	59	10	6.57	+3.00	10.55	4.41	......	10	10	11	10
1892	29.9	−1.0	67	−6	5.13	+1.56	7.05	2.50	......	10	10	9	12
1893	21.6	−9.3	54	−21	3.04	−0.53	4.56	1.87	......	9	10	10	11
1894	34.2	+3.3	61	−4	2.34	−1.23	3.80	1.18	......	11	10	8	13
1895	28.1	−2.8	64	−4	4.66	+1.09	5.80	2.48	9.7	11	10	10	11
1896	28.6	−2.3	61	−7	1.66	−1.91	2.81	0.68	......	5	12	10	9
1897	29.0	−1.9	64	−6	2.80	−0.77	4.21	1.70	11.5	9	11	8	12
1898	32.6	+1.7	64	−10	4.20	+0.63	5.90	2.79	9.7	11	9	11	11
1899	30.1	−0.8	60	−21	4.01	+0.44	5.73	2.40	6.0	11	13	8	10
1900	32.4	+1 5	64	−5	3.85	+0.28	5.50	2.37	2.6	10	11	11	9
1901	30.4	−0.5	63	−6	2.52	−1.05	4.00	1.35	5.4	9	11	11	9
1902	28.4	−2.5	58	−5	3.28	−0.29	4.35	2.52	8.6	10	12	9	10
1903	30.4	−0.5	57	−5	3.90	+0.33	5.04	2.31	6.4	10	10	10	11
1904	23.3	−7.6	58	−34	3.09	−0.48	4.67	1.34	15.6	10	13	7	11
1905	27.0	−3.9	60	−16	4.18	+0.61	7.13	2.68	21.3	9	12	9	10
1906	36.5	+5.6	74	−5	2.85	−0.72	3.86	2.08	3.1	11	11	9	11
1907	31.8	+0.9	71	−19	3.50	−0.07	5.80	1.93	10.3	14	8	9	14
1908	31.8	+0.9	60	−6	3.74	+0.17	5.22	2.29	9.9	9	12	11	8
1909	33.2	+2.3	69	−12	3.18	−0.39	4.13	2.18	7.5	12	8	9	14
1910	29.7	−1.2	54	−15	5.04	+1.47	6.65	3.66	13.3	15	8	8	15
1911	33.5	+2.6	63	0	3.44	−0.13	5.34	1.97	3.6	14	10	7	14
1912	22.3	−8.6	58	−32	2.82	−0.75	4.62	1.73	13.4	13	8	12	11
1913	39.5	+8.6	68	10	3.58	+0.01	4.71	2.63	0.8	14	11	7	13
1914	31.9	+1.0	73	−12	3.85	+0.28	6.15	1.95	2.4	9	9	8	14
1915	33.5	+2.6	61	3	6.55	+2.98	8.92	4.40	3.4	12	11	6	14
1916	35.1	+4.2	74	−2	1.50	−2.07	2.96	0.92	1.9	11	11	8	12
1917	31.4	+0.5	58	0	3.26	−0.31	4.52	2.35	5.4	13	10	8	13
1918	20.3	−10.6	56	−16	4.14	+0.57	6.14	2.78	18.9	11	12	8	11
1919	34.1	+3.2	62	−7	3.51	−0.06	4.44	2.24	1.3	8	14	7	10
1920	23.6	−7.3	53	−10	2.60	−0.97	3.53	1.61	6.6	11	11	7	13
1921	33.0	+2.1	63	−5	2.63	−0.94	3.49	1.78	2.7	9	13	8	10
1922	27.6	−3.3	57	−11	2.62	−0.95	4.13	1.08	11.1	8	15	6	10
1923	30.1	−0.8	66	−14	5.22	+1.65	7.26	3.41	16.6	12	9	7	15
1924	32.2	+1 3	65	−6	4.48	+0.91	5.69	2.88	1.4	8	15	8	8
1925	27.4	−3.5	59	−20	4.43	+0.86	8.73	2.54	22.8	10	12	6	13
1926	30.8	−0.1	63	−9	2.61	−0.96	4.04	1.63	2.4	9	11	8	12
1927	29.2	−1.7	70	−12	2.22	−1.35	3 32	1.19	7.9	11	11	7	13
1928	32.5	+1.6	65	−15	2.26	−1.31	3.97	1.37	8.3	8	15	8	8
1929	30.7	−0.2	67	−4	3.49	−0.08	5.03	1.92	1.6	10	13	7	11
1930	31.7	+0.8	72	−14	2.92	−0.65	4.03	1.80	5.9	10	10	6	15
1931	31.6	+0.7	64	−5	2.16	−1.41	4.35	1.37	1.6	5	16	7	8
1932	42.4	+11.5	76	18	4.50	+0.93	6.09	2.79	1.5	13	8	6	17
1933	38.5	+7.6	67	2	2.39	−1.18	4.45	1.38	1.2	8	13	7	11
Period	30.9	....	78	−34	3.57	....	10.55	0.68	7.5	10	11	8	12

W. B. O. Philadelphia-3-3-33-850.

Climatological Data for January, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	36.0	+8.7	58	23	12	1	30	1.82	−1.72	0.50	2.5	7	14	2	15	.....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	36.1	+9.2	62	17	7	1	37	1.85	−1.70	0.72	4.9	7	17	7	7	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	2	1	....	1.64	−1.54	0.68	9.1	6	17	6	8	nw.	Brice E. Riker.
Dover	Morris	600	48	35.8	+9.2	60	23	9	1	33	2.17	−2.22	0.72	4.0	9	10	10	11	......	William C. Harris
Layton	Sussex	480	31	33.4	+8.7	57	23	7	1	38	2.20	−0.69	0.70	10.5	6	11	2	18	nw.	A. M. Depue.
Long Valley	Morris	520	1	35.4	......	55	7†	10	1	33	1.58	......	0.68	3.0	4	15	6	10	w.	S. N .Dilts.
Newton	Sussex	769	48	37.4	+11.7	63	4	6	1	41	2.78	−0.83	1.08	8.4	8	12	9	10	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	34.2	+6.1	53	18	14	1	22	1.75	−1.85	0.63	1.2	6	10	6	15	......	Town Engineer.
Sussex	Sussex	442	37	34.2[a]	+7.6	52	7	9	1	26	1.75	−1.73	0.59	6.7	8	15	5	11	......	A. J. W. Mowatt
Means and extremes	......	......	....	35.3	.+8.7	62	17	2	1	41	1.99	−1.53	1.08	5.2	7	13	6	12	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	36.0	+8.7	61	7	11	1†	39	1.58	−2.25	0.58	......	6	13	4	14	sw.	John Kline.
Canoe Brook	Essex	173	2	35.5	......	60	23	11	1	41	1.87	......	0.53	......	7	15	6	10	w.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	2.65	−1.04	0.68	......	12	12	9	10	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	40.4	+10.2	67	23	13	1	40	1.38	−2.66	0.37	T.	7	15	5	11	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§46	38.6	+8.8	64	23	12	1	35	1.78	−1.91	0.74	T.	7	19	6	6	nw.	Hiram E. Deats.
Jersey City	Hudson	10	34	40.0	+7.8	62	23	14	1	27	1.58	−1.92	0.79	T.	7	13	8	10	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	38.2	+7.7	60	23	12	1	27	1.68	−1.97	0.69	2.0	9	15	2	14	s.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	37.6	+9.6	63	23	12	1	39	1.71	−1.99	0.53	1.0	10	17	3	11	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	38.8	+8.6	60	23	13	1	30	1.77	−2.02	0.82	T.	7	13	9	9	nw.	N. J. Experiment Station.
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	1.92	......	0.81	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	38.8	+9.2	60	23	13	1	30	2.09	−1.76	0.77	4.0	11	11	7	13	sw.	Philip Del Vecchio.
Plainfield	Union	120	44	37.8	+7.8	62	23	11	1	34	1.62	−2.40	0.82	0.2	8	10	10	11	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	37.8	......	62	23	13	1	30	1.76	......	0.80	0.5	6	12	6	13	nw.	George P. Kirsten.
Somerville, (near)	Somerset	70	49	37.6	+8.8	62	23	13	1	34	1.53	−2.19	0.80	0	6	11	8	12	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	2.13	......	0.81	......	11	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	62	40.2	+9.3	62	23	14	1	31	1.53	−2.13	0.78	T.	7	10	5	16	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	38.1	+8.7	67	23	11	1†	41	1.80	−2.01	0.82	0.8	8	14	6	11	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	38	41.4[d]	+8.4	64	23	15	3	41	4.05	+0.52	......	T.	5	9	5	17	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	49	40.6	+6.9	61	4†	16	1	29	3.86	+0.34	2.10	T.	7	17	2	12	sw.	Bennett K. Matlack
Burlington	Burlington	12	§46	40.9	+8.6	62	23	16	2	33	2.34	−1.06	1.26	T.	5	15	7	9	sw.	Public Service Power Co.
Camden	Camden	20	....	40.0	......	64	23	16	1	30	2.73	......	1.50	0.5	9	10	8	13	nw.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	39.3	......	61	23	14	1	30	2.33	−1.66	0.95	T.	7	17	5	9	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	39.8[f]	......	66	4	14	1	38	3.55	−0.24	2.25	T.	6	15	8	8	sw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	38	......	......	......	......	......	......	..	2.41	−0.86	0.96	T.	8	....	....	....	......	H. M. Barrett.
Indian Mills‡‡	Burlington	76	43	40.6	+8.7	63	4†	14	2	38	3.71	−0.11	2.02	0	7	13	7	11	sw.	James M. Armstrong.
Lakewood	Ocean	54	28	39.8	+8.5	61	23	15	1	32	1.93	−1.75	1.32	T.	6	14	7	10	nw.	R. W. Holman.
Moorestown	Burlington	......	69	39.4	+8.7	62	4†	15	1	29	2.83	−0.63	1.30	T	10	9	9	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	3.65	+0.12	1.89	T.	6	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	40.6	......	62	23	17	1	29	2.57	......	1.31	T.	9	12	5	14	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	39.8	......	66	19	16	1	39	4.32	+0.16	1.95	.....	8	14	7	10	nw.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	4.45	......	2.80	0	6	13	11	7	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	37.0	......	62	24	10	1†	44	1.91	......	0.70	......	7	15	13	3	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	39.6	+9.1	61	23	14	1	28	1.93	−1.38	0.82	T.	9	9	6	16	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	2.11	......	0.89	0.4	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	43.6	+11.0	64	23	17	1	25	3.90	+0.27	2.58	0	9	7	15	9	sw.	John H. Brown.
Philadelphia, Pa.	......	117	61	42.6	+10.0	63	23	17	1	25	2.66	−0.64	1.54	T.	9	10	6	15	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	40.1	+8.7	66	4†	10	1†	44	3.03	−0.48	2.80	0.1	7	12	8	11	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	41.7	+9.5	61	23	16	1	28	2.64	−0.93	1.10	T.	9	22	6	3	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	42.5	+10.0	64	23	19	1	23	3.37	−0.12	1.92	T.	8	9	5	17	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	38.2	+6.6	62	23	15	1	28	2.01	−2.17	0.91	T.	10	13	7	11	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	39.8	+9.8	56	19	16	1	26	1.92	−2.04	0.97	T.	9	10	6	15	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	40.6	+9.0	64	23	15	1	28	2.49	−1.32	1.92	T.	9	13	6	12	nw.	
For the State	......	......	....	38.5	+8.8	67	23	2	1	44	2.39	−1.27	2.80	1.2	8	13	7	11	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for January, 1933

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware					.08		.02		.50			.07							.30			.45				.40						1.82
Charlotteburg	Passaic					.02				.72			.08							.29			.51				.19		.04				1.85
Culvers Lake	Delaware				T.	T.		T.		.68	T.		.06							.20			.50				.17	T.	.03				1.64
Dover	Passaic					.03		.02		.72		.15								.32			.46			*	.37	.10					2.17
Layton	Delaware									.70	T.		.20							.29			.53				.41		.07				2.20
Long Valley	Morris				T.	T.		T.		.68										.27			.38	T.			.25		T.				1.58
Newton	Delaware				T.	T.		1.08		.40	.10		.08							.27			.48				.34	T.	.03	T.			2.78
Phillipsburg	...do			T.		.04		T.		.63		T.	T.							.25			.50			.02	.31	T.	T.				1.75
Sussex	Hudson					.02		.01		.59			.14							.24			.44				.23	.08					1.75
The Red Sandstone Plain.																																	
Boonton ‖	Passaic	T								.09	.58									.23			.29	.12			.27	T.	T				1.58
Canoe Brook ‖	Essex	T.				T.			T.	.29	.53									.26			.28	.06			.38	T	.07				1.87
Chatham ‖	...do				.02	T.			.07	.32	.68		.12							.13	.08		.31	.13			.39	.28	.12				2.65
Elizabeth	Coast				T.			T.		.37	.04		.07							.22			.31	T.			.34	T.	.03				1.38
Flemington	Raritan				T.	.02		T.		.74										.27			.36	.02		T.	.26	T.	.11				1.78
Jersey City	Coast				T.	.02		T.		.79			.06							.20		.24				T.	.25	T.	.02	T.	T.		1.58
Lambertville	Delaware							.03		.69			.04							.20		T.	.14			.04	.37	.04	.13				1.68
Little Falls. ‖	Passaic	.01				T.				.16	.53		.01							.25			.25	.16				.32	.01	.01			1.71
New Brunswick	Raritan					.02		T.		.82	T.		.05							.21		T.	.15	T.			.48	T.	.04				1.77
New Milford ‖	Hackensack					.06					.81									.28	.04		.23	.21			.22	.07					1.92
Paterson	Passaic				.02	.08		.02		.77										.29			.45	.02			.30	.08	.02		.04		2.09
Plainfield	Raritan							.01		.82			.06							.19			.25				.25	.03	.01	T.			1.62
Ridgefield**	Hackensack					T.				.80			.10							.21				.21			.40	T.	.04	T.	T.		1.76
Somerville	Raritan							.01		.80			.01							.23			.16				.32						1.53
Woodcliff Lake ‖	Hackensack	.04								.03	.81									.23	.04		.28	.23			.38	.04	.03		.02		2.13
New York, N. Y***	Coast				T.	.02		T.		.78		T.	.05						T.	.21			.24			T.	.21	.02	T.	T.	T.		1.53
The Southern Interior.																																	
Belleplain	Tuckahoe																																4.05
Bridgeton	Delaware							T.		.94												.35	.08			.17	1.93		.23				3.83
Burlington	Delaware							T.		.83	T.		.04									T.	.10			T.	1.26	T.	.11				2.34
Camden***	..do				T.	T.		T.		.77		T.	.03							.13		.01	.12			.72	.78	.13	.04				2.73
Clayton	....do																																......
Freehold	Raritan					.04		T.		.95		T.	.08							.19		T.	.08				.89		.10	T			2.33
Hammonton	Mullica					T.		T.		.89			.20	T.	T.					T.		T.	.11			.10	2.15	T	.10				3.55
Hightstown	Raritan					.03		T.		.83			.10							.20			.17				.96	.02	.10				2.41
Indian Mills	Mullica					.04		T.		.97			.12							.20		T.	.16			T.	2.02		.20				3.71
Lakewood	Metedeconk							T.		.30			.06		T.					.03		T.	.10				1.32	T.	.12				1.93
Moorestown ‖	Delaware	.18								.23	.60		.06							.13	T.		.09	.01			1.30	.05	.18				2.83
Northfield	Coast							T.		1.26					T.						.05	.08				.21	1.89		.16				3.65
Pemberton	Delaware	T.				T.		T		.91	.01		.03							.13			.01	.06		.01	1.30	T.	.11				2.57
Pleasantville ‖	Coast	.30				T	T.			.50	.79		.04		T.							T	.13				1.95	.37	.24	T.			4.32
Port Norris	Maurice									1.15			.08										.11	.09			2.80		.22				4.45
Runyon	Coast									.70	.05		.05							.22		.15					.65		.09				1.91
Trenton***	Delaware				T.	.01		T.		.71		T.	.05						T.	.17		T.	.06			.11	.71	.07	.04				1.93
Trenton No. 2 ‖	...do	.07				.02			T.	.18	.54		.05					T.		.17	T.		.06	T.			.82	.07	.13				2.11
Tuckerton	Coast	.02								.96		.02			.04					.02		.04				.11	2.42		.27				3.90
Phila., Pa***	Delaware			T.	T.	T.		T.		.75		T.	.01							.12		.01	.10			.83	.71	.11	.02				2.66
The Sea Coast.																																	
Asbury Park	Coast				.02	.02		T.		.95			.10		T.					.30		T.	.10			.10	1.00	T.	.05				2.64
Atlantic City***	...do					T.		T.		1.12		T.	.04		T.	T.				T.		.05	.08			.98	.94	.12	.04				3.37
Long Branch**	...do					.06		.02		.91		.05			T.					.16		T.	.17			.09	.50	.04	.01		T.		2.01
Sandy Hook***	...do			T.	T.	.03		T.		.97		.02	.06		T.			T.		.22		T.	.22			.01	.36	.03					1.92

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precip- ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following neasurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
tlantic City	30.05	30.61	1	29.25	26	17.8	65	ne.	26	79	69	71	62
amden	......	30.62	13	29.41	27	10.1	37	nw.	29	......	......	......	......
ong Branch	30.03	30.63	13	29.38	28	......	......	......	......	66	58	63	......
ew York, N. Y	30.02	30.64	1-13	29.38	28	15.8	57	nw.	7	65	58	60	58
hiladelphia, Pa	30.05	30.66	1	29.41	27	14.5	46	n.	26	65	56	59	56
idgefield	30.02	30.65	1	29.38	28	......	......	......	......	......	......	......	......
andy Hook	30.02	30.63	13	29.38	28	16.2	46	ne.	26	74	69	72	57
renton	30.04	30.65	13	29.40	28	10.8	37	nw.	29	77	63	70	61

Daily Temperatures for January, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	40	40	45	49	46	47	53	49	35	44	50	47	34	35	38	52	51	47	44	49	48	45	58	52	43	43	39	38	35	40	47	44.6
	Minimum	12	17	20	27	35	20	28	27	30	21	28	28	18	21	30	22	28	34	35	35	30	38	41	30	24	33	23	32	29	27	23	27.3
Charlotteburg	Maximum	41	44	51	57	57	47	52	56	34	42	53	51	30	31	44	57	62	51	47	51	46	51	56	55	44	39	38	35	36	35	40	46.2
	Minimum	7	18	14	28	38	18	28	24	25	25	32	29	14	19	24	27	27	32	25	36	27	43	42	33	16	30	26	30	25	23	20	26.0
Dover	Maximum	37	44	46	57	49	48	53	42	36	43	55	50	41	32	39	57	54	50	52	51	48	48	60	48	40	40	37	38	32	37	44	45.4
	Minimum	9	18	18	30	26	22	30	25	31	26	22	22	17	21	23	28	36	29	28	30	28	38	41	21	20	32	30	30	29	25	23	26.1
Layton	Maximum	30	43	43	56	49	51	54	45	35	41	47	46	30	32	38	54	54	49	45	54	49	45	57	47	42	42	36	40	32	38	42	44.1
	Minimum	7	12	15	24	37	15	25	20	26	15	34	20	10	15	27	16	27	27	26	30	24	37	37	25	16	28	18	30	27	26	17	22.7
Long Valley	Maximum	42	41	45	52	50	44	55	52	36	39	53	52	30	34	37	52	43	52	46	49	45	47	55	50	44	40	43	36	33	36	42	44.3
	Minimum	10	17	16	27	39	20	22	25	32	26	28	27	17	21	25	27	35	27	28	37	30	30	33	34	22	23	29	32	27	26	26	26.4
Newton	Maximum	42	47	53	63	57	57	55	59	42	45	49	60	32	33	39	55	60	60	55	41	51	45	59	60	49	44	39	38	41	40	45	48.9
	Minimum	6	15	24	30	31	21	32	23	28	23	31	19	15	16	25	23	33	31	29	35	28	36	43	33	22	30	24	30	25	24	22	26.0
Phillipsburg	Maximum	28	31	37	40	46	34	47	46	38	39	50	47	29	34	34	33	49	53	43	41	43	47	47	39	40	40	35	35	34	34	33	39.5
	Minimum	14	18	21	29	33	23	30	28	33	27	37	25	21	23	28	25	31	36	37	35	33	40	38	30	25	31	27	32	31	29	26	28.9
Sussex	Maximum	23	41	40	46	47	....	52	36	35	34	43	43	28	31	34	43	50	50	43	43	46	46	50	49	41	40	40	35	34	33	48	40.8ᵃ
	Minimum	9	17	21	20	38	....	48	20	28	21	32	28	16	27	28	22	32	32	28	38	28	38	41	28	23	33	23	32	28	26	24	27.6ᵃ
The Red Sandstone Plain.																																	
Boonton§§	Maximum	29	45	47	54	46	48	61	40	46	43	59	38	35	34	39	56	55	47	57	49	48	53	50	51	47	42	39	54	51	38	44	46.6
	Minimum	11	11	18	21	32	21	22	29	27	29	30	33	17	18	21	20	23	35	28	34	28	31	31	32	21	29	24	32	29	27	21	25.3
Canoe Brook§§	Maximum	31	44	46	52	47	49	55	46	38	44	57	37	35	34	40	59	56	47	52	51	49	56	60	56	43	41	38	37	34	40	46	45.8
	Minimum	11	17	15	26	34	17	23	26	27	26	27	33	16	23	18	18	27	34	24	38	24	34	39	28	18	30	23	31	28	27	18	25.2
Elizabeth	Maximum	46	42	48	51	49	50	57	55	38	45	60	60	32	37	48	65	64	62	57	53	54	51	67	60	53	51	42	45	44	47	49	51.0
	Minimum	13	20	20	30	38	23	29	28	31	22	31	31	24	25	27	25	32	37	32	41	32	40	45	30	30	35	34	34	30	29	25	29.7
Flemington	Maximum	43	48	48	51	51	51	58	54	36	45	58	54	32	36	45	60	58	54	50	54	47	46	64	54	44	42	42	42	39	45	50	48.4
	Minimum	12	17	20	28	38	22	29	25	29	27	29	32	21	23	27	25	34	35	32	39	31	39	43	31	25	37	32	32	30	28	25	28.9
Jersey City	Maximum	38	41	48	52	50	48	56	40	41	45	58	55	35	36	43	57	56	50	53	54	51	51	62	51	47	42	43	39	34	40	45	47.1
	Minimum	14	22	31	39	37	32	38	29	34	31	37	28	22	28	30	31	40	37	38	37	35	42	47	37	37	34	34	32	29	27	28	32.8
Lambertville	Maximum	39	42	47	54	49	49	56	43	36	44	56	53	35	35	41	56	55	51	54	53	49	49	60	50	42	47	38	36	38	40	45	46.5
	Minimum	12	18	25	37	31	27	36	26	31	28	32	29	20	23	25	29	34	34	35	39	34	39	48	31	27	33	32	32	28	27	26	29.9
Little Falls§§	Maximum	32	48	49	57	48	50	56	46	40	46	60	43	35	35	41	61	56	49	57	51	52	55	63	55	42	43	40	40	36	41	47	47.5
	Minimum	12	20	20	27	35	22	29	27	28	28	34	34	20	22	22	22	30	35	29	36	28	32	39	29	23	31	33	33	29	27	23	27.7
New Brunswick	Maximum	42	42	47	53	50	50	57	56	39	44	58	57	32	34	42	55	56	54	53	56	47	46	60	53	46	44	41	38	36	40	45	47.5
	Minimum	13	18	22	32	41	25	36	27	31	30	31	31	21	25	26	25	33	37	32	41	31	39	45	32	27	34	31	32	30	28	25	30.0
Paterson	Maximum	41	45	46	54	49	48	55	50	38	43	58	56	30	34	40	54	56	54	49	55	49	46	60	54	48	42	41	40	39	40	45	47.1
	Minimum	13	22	23	34	37	28	35	28	32	30	35	26	22	23	26	27	29	36	34	41	32	40	46	35	21	35	35	36	29	27	28	30.5
Plainfield	Maximum	39	42	48	51	48	49	57	40	41	44	59	53	34	36	41	56	58	52	53	52	48	52	62	50	47	41	43	39	34	40	45	46.9
	Minimum	11	17	18	29	37	21	32	27	31	28	27	28	20	26	27	22	33	36	37	34	29	40	42	28	25	34	35	32	28	27	25	28.6
Ridgefield	Maximum	30	45	48	52	49	48	56	38	38	45	60	40	28	35	41	56	56	47	51	53	49	47	62	50	43	42	40	41	37	40	45	45.5
	Minimum	13	21	23	33	36	29	39	27	34	29	35	27	21	24	28	26	37	34	34	32	31	38	42	33	27	33	34	32	29	27	25	30.1
Somerville	Maximum	41	45	49	52	50	50	58	50	37	45	59	55	30	36	44	57	57	51	51	54	48	46	62	52	45	43	41	42	38	43	47	47.7
	Minimum	13	15	18	28	33	20	31	25	30	27	28	28	21	25	23	23	33	33	30	30	30	39	44	29	22	35	29	32	30	28	22	27.5
New York, N. Y	Maximum	30	41	49	54	51	48	56	40	40	45	58	56	35	36	44	57	56	50	54	54	51	51	62	51	47	42	43	39	34	40	45	47.1
	Minimum	14	23	33	41	37	34	39	29	34	31	39	25	23	28	30	32	40	37	39	38	36	43	48	38	37	34	34	32	29	27	28	33.3
The Southern Interior.																																	
Belleplain	Maximum	....	....	56	62	52	53	58	55	43	45	62	....	57	40	48	57	55	51	63	58	49	63	64	54	50	50	40	40	44	45	....	52.4ᵈ
	Minimum	....	....	15	42	41	18	30	25	32	26	35	....	25	30	26	21	30	35	38	29	28	40	38	32	24	39	27	32	32	29	....	30.3ᵈ
Bridgeton	Maximum	40	46	52	61	51	54	55	56	41	46	56	53	35	41	44	54	55	51	61	59	49	60	62	53	51	50	40	41	43	42	50	50.2
	Minimum	16	20	24	38	36	25	33	28	33	28	35	31	24	27	26	26	31	39	37	42	32	40	50	33	29	36	27	31	31	29	27	31.1
Burlington	Maximum	54	49	51	60	53	51	59	58	48	45	58	58	33	36	43	57	40	49	55	56	50	54	62	58	49	47	42	39	43	43	46	50.2
	Minimum	26	16	24	31	34	24	34	35	31	32	34	33	24	26	32	24	35	39	44	44	33	35	38	33	26	37	31	33	34	31	27	31.6
Camden	Maximum	27	44	51	62	51	53	59	43	40	46	58	52	31	38	47	56	52	50	58	55	51	54	64	50	50	44	41	39	43	43	49	48.5
	Minimum	16	22	24	32	30	24	40	32	33	33	35	27	24	27	28	26	37	36	39	38	33	40	45	30	27	37	30	34	32	32	30	31.4
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	44	44	50	58	51	49	57	50	41	44	59	56	32	34	43	54	46	40	56	57	49	56	61	52	47	45	40	38	36	39	44	47.5
	Minimum	14	18	26	37	40	26	35	27	31	30	35	31	24	27	27	27	35	35	34	42	33	38	50	31	28	34	34	32	29	29	24	31.1
Hammonton	Maximum	40	47	56	66	53	56	60	55	41	46	59	57	35	40	48	56	57	51	63	58	54	58	64	52	50	52	41	40	42	44	48	51.3
	Minimum	14	15	18	35	43	21	27	23	29	26	31	28	22	25	25	23	31	35	35	56	....	....	....	....	....	....	28	32	32	31	25	28.4ᶠ
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	58	57	33	34	44	56	51	51	54	59	59	54	67	61	52	57	47	43	43	45	48	......
	Minimum	....	....	....	....	....	....	....	....	....	....	36	32	22	26	27	27	36	36	32	41	32	32	52	52	25	26	31	32	31	28	25	......
Indian Mills	Maximum	47	46	57	63	60	53	60	57	42	46	60	57	34	38	45	55	57	54	61	59	52	58	63	60	50	60	42	38	40	44	47	51.8
	Minimum	16	14	19	35	44	21	32	25	32	30	32	32	24	27	28	21	30	38	35	45	28	27	49	28	23	35	27	28	32	30	23	29.4
Lakewood	Maximum	44	43	53	60	52	50	59	55	42	45	60	58	38	35	44	53	56	53	60	57	50	58	61	53	48	48	41	40	38	40	45	49.5
	Minimum	15	16	21	33	38	22	32	27	30	29	34	32	25	30	29	24	31	35	32	44	32	41	44	28	22	37	36	33	31	30	24	30.2
Moorestown	Maximum	28	43	52	62	49	52	58	41	40	44	57	53	33	36	44	55	52	48	57	53	50	55	62	51	49	44	39	38	41	43	47	47.6
	Minimum	15	19	25	35	32	27	39	30	33	32	39	27	24	24	27	26	37	36	39	36	34	41	45	29	27	34	30	32	32	31	28	31.1
Pemberton	Maximum	43	42	53	60	52	51	58	53	41	45	59	58	33	38	44	54	53	51	59	57	59	57	62	54	49	48	40	38	41	42	46	49.7
	Minimum	17	19	24	33	43	24	37	29	33	29	36	33	25	28	30	25	34	36	38	45	32	39	47	30	26	35	30	33	33	31	27	31.6
Pleasantville§§	Maximum	32	46	55	62	54	53	60	48	44	46	54	45	40	53	49	53	57	51	66	56	48	60	65	59	49	45	41	41	45	44	49	50.6
	Minimum	16	17	19	23	42	20	22	22	29	28	29	39	25	27	26	22	26	37	30	47	28	38	46	32	22	36	31	32	32	31	22	28.9
Runyon	Maximum	36	49	47	50	48	51	52	50	40	50	60	56	36	36	54	54	50	52	54	50	52	54	60	62	50	50	45	38	42	39	48	48.9
	Minimum	10	10	10	24	32	14	19	22	27	30	27	36	24	21	20	16	26	30	38	34	36	36	26	18	18	36	30	29	27	28	24	25.1
Trenton	Maximum	28	43	50	57	48	51	58	41	40	44	57	54	30	34	43	55	56	51	55	56	48	52	61	50	47	43	38	37	39	41	45	46.8
	Minimum	14	22	28	35	36	29	38	32	34	32	35	26	23	25	29	29	37	38	38	43	36	42	46	36	30	35	33	33	31	29	30	32.4
Tuckerton	Maximum	30	46	51	60	55	60	54	48	44	45	52	45	44	54	55	58	54	55	54	56	52	52	64	60	50	44	42	44	43	44	51	50.5
	Minimum	17	25	39	42	45	35	34	35	36	36	40	31	25	34	32	35	40	42	41	46	44	46	48	42	36	37	36	34	32	34	36	36.6
Philadelphia, Pa	Maximum	30	42	51	59	53	53	61	42	42	45	57	55	35	40	43	57	52	53	58	58	49	54	63	53	50	46	42	40	43	44	49	49.0
	Minimum	17	25	36	43	40	35	42	35	36	36	41	30	26	32	32	35	40	41	41	46	42	44	48	42	36	37	36	35	33	34	34	36.3
The Sea Coast.																																	
Asbury Park	Maximum	41	46	47	58	52	51	58	49	43	52	60	59	32	38	44	58	55	53	60	59	51	53	61	54	46	44	40	40	36	42	47	49.3
	Minimum	16	23	30	41	40	30	39	30	37	31	39	31	27	32	32	31	38	39	39	42	37	42	44	37	33	38	36	33	31	31	28	34.1
Atlantic City	Maximum	33	44	50	53	54	49	58	42	55	45	52	52	40	40	47	50	53	52	58	57	47	51	64	54	48	49	41	40	43	45	50	48.6
	Minimum	19	29	35	45	38	33	42	32	37	32	45	29	27	34	32	32	42	41	43	43	42	45	49	40	42	38	34	34	33	32	30	36.4
Long Branch	Maximum	26	40	45	56	47	45	55	40	41	46	57	56	32	34	44	52	53	49	56	52	46	52	62	50	45	42	40	41	37	42	47	46.1
	Minimum	15	19	23	34	27	25	33	27	35	30	37	28	27	30	30	28	36	33	36	34	33	38	40	29	29	35	33	34	30	25	26	30.3
Sandy Hook	Maximum	27	41	47	50	49	47	56	40	42	43	56	53	31	35	41	50	52	48	56	54	45	48	55	48	45	44	40	39	36	39	43	45.2
	Minimum	16	24	32	37	36	34	40	32	37	33	40	27	26	29	33	32	39	38	40	39	38	42	44	39	38	37	35	35	31	31	30	34.3

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. **Observations taken in the morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVIII. FEBRUARY, 1933. No. 2.

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GENERAL SUMMARY.

The temperature average of 33.5 degrees for the State for February brought the average departure for the three winter months just ended to 4.7 degrees above normal. The previous winter of 1931-32, which was the warmest on record, had a departure of 8.4 degrees above normal. The main warm period during the past month came from the 17th to 25th, inclusive, while the most pronounced cold spell was from the 9th to 13th, inclusive. The highest temperatures occurred mostly on the 8th, while the lowest were registered generally on the 13th. The majority of the stations in the northern part of the State had sub-zero temperatures, with only a few in the southern portion having like figures.

The precipitation was practically normal. About one-third of it was from melted snow. It was very evenly distributed throughout the month with the heaviest general amounts occurring on the 8th, 11th and 20th. The main snowstorm came on the 11th with an estimated average for the State of about eight inches. A lesser fall of from two to nearly six inches was experienced on the 4th, being heaviest along the southern seacoast section. The average of 10.4 inches, unmelted, while only a little more than the normal, is the heaviest for February since 1926. However, during the intervening years snowfall was quite deficient. Water supplies are ample and the Spring starts with a good supply in the soil; in some places the ground is too wet for early Spring work.

No damage by wind was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 33.5°, which was 2.8° above normal. The highest temperature was 67° at Boonton, Hammonton and Long Branch on the 8th, and the lowest, −12°, at Long Valley and Somerville on the 13th. The greatest daily range of temperature was 50° at Charlotteburg on the 9th. The highest monthly mean temperature was 37.2° at Atlantic City, and the lowest, 28.0° at Phillipsburg.

The temperature departure from the normal for the year. 1933, by sections, is: The Highlands, +6.4°; Red Sandstone Plain, +6.2°; Southern Interior, +6.4°; Sea Coast, +6.1°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 3.33 inches, which was 0.28 inch below normal. The average total snowfall at 20 selected stations was 10.4 inches. The greatest monthly precipitation was 4.72 inches, at Atlantic City, and the least, 2.20 inches at Sussex. The greatest amount of precipitation in any 24 consecutive hours was 1.43 inches at Atlantic City on the 10-11th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or 1 more than normal.

The precipitation accumulated departure from the normal for the year 1933, to date by sections, is: The Highlands, —1.88 inches; Red Sandstone Plain, —2.53 inches; Southern Interior, —0.43 inch; Sea Coast, —1.25 inches.

WIND.

The prevailing wind direction was from the Northwest. The wind movement averaged 14 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 51 miles per hour from the Northwest at Atlantic City on the 8th.

MISCELLANEOUS.

The per cent of possible sunshine was 63, or 7 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.03 inches, or 0.07 inch below normal. The highest reading was 30.81 inches at Atlantic City and Camden on the 10th, and the lowest 29.29 inches at Long Branch on the 8th.

The mean stage of the Delaware River at Phillipsburg was 3.2 feet, and the highest 4.8 feet on the 21st and 22d. The mean stage at Trenton was 2.3 feet, and the highest 3.4 feet on the 21st.

Dense fog occurred on the following dates: 1, 2, 4, 8, 15, 20 and 28th. A thunderstorm was recorded at Camden on the 8th. Sleet in light amounts was noted on the 5th, 8th, 10th, 11th, 14th, 21st, 24th and 25th. It was general on the 11th and 25th.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	23.9	−6.8	54	−2	3.93	+0.32	5.85	1.44	......	......	......	......	......
1886	28.9	−1.8	64	−10	5.42	+1.81	8.00	4.13	......	......	......	......	......
1887	33.9	+3.2	69	6	5.24	+1.63	6.74	4.13	......	13	......	......	......
1888	30.6	−0.1	60	−5	3.53	−0.08	6.01	2.04	......	8	......	......	......
1889	27.7	−3.0	53	−3	2.49	−1.12	3.80	1.65	......	8	......	......	......
1890	**39.9**	+9.2	76	14	4.17	+0.56	5.32	2.43	......	10	......	......	......
1891	38.0	+7.3	71	1	5.11	+1.50	7.20	3.70	......	14	6	9	13
1892	33.6	+2.9	58	7	1.63	−1.98	3.62	0.67	......	7	7	9	13
1893	30.1	−0.6	63	−1	5.73	+2.12	8.90	3.14	......	11	7	8	13
1894	29.7	−1.0	62	−11	4.42	+0.81	6.17	3.25	......	11	9	8	11
1895	23.6	−7.1	57	−12	1.28	−2.33	2.34	**0.55**	11.6	5	13	9	6
1896	32.1	+1.4	62	−12	**6.77**	+3.16	**10.06**	4.82	6.7	12	9	9	11
1897	32.5	+1.8	59	−6	3.61	0.00	6.37	2.38	8.0	8	8	10	10
1898	32.7	+2.0	65	−15	3.48	−0.13	5.45	1.55	2.0	9	12	7	9
1899	25.8	−4.9	60	−17	6.06	+2.45	8.77	3.78	**31.3**	15	10	6	12
1900	31.0	+0.3	69	−6	5.30	+1.69	7.88	3.27	9.6	10	9	9	10
1901	25.4	−5.3	52	−6	**0.94**	−2.67	1.65	0.69	4.9	4	15	9	4
1902	27.4	−3.3	62	−7	6.24	+2.63	8.44	4.29	16.5	9	12	6	10
1903	33.7	+3.0	70	−16	4.87	+1.26	6.60	3.74	6.7	10	12	8	8
1904	24.8	−5.9	65	−16	2.45	−1.16	3.09	1.36	5.6	8	13	8	8
1905	**23.4**	−7.3	53	−18	2.53	−1.08	3.96	0.70	7.3	7	14	7	7
1906	30.9	+0.2	64	−12	2.58	−0.03	3.85	1.77	5.4	7	14	7	7
1907	23.6	−7.1	55	−22	2.67	−0.94	3.90	1.82	20.8	8	14	7	7
1908	28.1	−2.6	65	−17	4.79	+1.18	7.44	2.85	11.9	9	10	10	9
1909	37.8	+7.1	72	−2	4.96	+1.35	6.78	3.55	2.3	12	6	10	12
1910	30.5	−0.2	69	−11	3.08	−0.53	4.81	1.06	6.2	10	10	9	9
1911	30.9	+0.2	67	−12	2.78	−0.83	4.06	1.76	11.2	11	8	7	13
1912	27.7	−3.0	61	−14	2.49	−1.12	3.12	1.68	2.8	5	11	12	6
1913	30.6	−0.1	70	−5	2.49	−1.12	3.21	1.48	3.5	7	16	6	6
1914	25.9	−4.8	67	−12	2.85	−0.76	4.94	1.89	15.1	9	12	7	9
1915	35.7	+5.0	75	−7	5.37	+1.76	7.28	2.97	3.5	8	11	6	11
1916	28.1	−2.6	63	−18	4.21	+0.60	6.17	2.84	11.4	11	10	6	13
1917	28.1	−2.6	62	−19	1.95	−1.66	2.80	0.92	8.3	11	10	9	9
1918	29.0	−1.7	67	**−23**	2.08	−0.53	3.41	1.03	2.6	7	12	8	8
1919	33.6	+2.9	65	4	3.39	−0.22	6.48	1.37	1.2	10	15	4	9
1920	27.9	−2.8	54	−17	4.20	+0.59	7.20	2.39	20.0	11	11	8	10
1921	34.0	+3.3	71	−5	3.81	+0.20	5.82	2.58	13.6	10	10	8	10
1922	33.6	+2.9	73	−10	2.94	−0.67	4.60	1.80	8.5	10	10	8	10
1923	26.1	−4.6	56	−12	2.58	−1.03	3.74	1.51	13.8	12	10	8	10
1924	28.9	−1.8	62	−3	4.10	+0.49	6.11	2.45	11.9	9	13	5	11
1925	37.3	+6.6	72	−1	2.23	−1.38	4.64	1.18	**0.7**	7	12	6	10
1926	29.4	−1.3	57	−11	4.54	+0.93	6.30	2.86	21.2	11	9	5	14
1927	36.1	+5.4	66	4	3.12	−0.49	4.55	2.18	5.1	11	10	8	10
1928	32.1	+1.4	63	−6	4.05	+0.44	5.63	2.17	4.4	10	12	7	10
1929	31.6	+0.9	63	−9	4.06	+0.45	5.92	2.76	9.2	8	13	7	8
1930	35.6	+4.9	**80**	−10	2.80	−0.81	5.13	1.07	4.2	9	13	7	8
1931	33.3	+2.6	62	−9	2.18	−1.43	3.42	0.81	3.0	8	14	5	9
1932	35.9	+5.2	69	4	2.16	−1.45	3.23	1.08	2.2	9	11	6	12
1933	33.5	+2.8	67	−12	3.33	−0.28	4.72	2.20	10.4	10	12	6	10
Period	30.7	....	80	−23	3.61	....	10.06	0.55	8.8	9	11	7	10

W. B. O. Philadelphia-3-28-33-850.

Climatological Data for February, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	41	31.8	+4.7	57	23†	−6	13	36	3.15	−0.69	1.04	10.0	8	14	2	12	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	40	31.6	+6.0	59	8	3	12	50	3.17	−0.85	0.96	13.0	12	16	5	7	nw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	31	......	......	......	......	−8	13	....	2.99	−0.07	0.95	13.9	9	16	6	6	w.	Brice E. Riker.
Dover	Morris	600	48	30.1^{b}	+3.9	58	8	−5	13	43	4.21	+0.18	1.17	14.8	10	3	16	9	......	William C. Harris
Layton	Sussex	480	31	28.4	+4.8	55	8	−11	13	48	3.20	+0.46	1.01	13.5	7	7	4	17	w.	A. M. Depue.
Long Valley	Morris	520	1	30.2	......	58	8	−12	13	42	3.19	....	0.98	12.0	9	11	5	12	w.	S. N .Dilts.
Newton	Sussex	769	48	31.6	+5.1	60	23	2	13	40	2.79	−0.77	0.93	11.5	12	11	4	13	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§49	28.0	+0.1	41	1†	−6	13	32	3.75	+0.11	0.99	9.5	11	15	4	9	......	Town Engineer.
Sussex	Sussex	442	37	30.1	+4.7	56	23	−8	13	43	2.20	−1.18	0.84	10.4	9	16	3	9	......	A. J. W. Mowatt
Means and extremes	......	......	....	30.2	+4.2	60	23	−12	13	50	3.18	−0.35	1.17	12.1	10	12	6	10	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§42	32.1	+5.0	67	8	−3	14	43	3.20	−0.77	1.03	......	8	11	2	15	sw.	John Kline.
Canoe Brook	Essex	173	2	31.5	......	60	8	−11	13	43	3.35	....	1.06	......	7	12	7	9	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	28	......	......	......	......	......	......	....	4.26	+0.83	1.04	11.0	12	13	5	10	......	Paul Molitor. Sr.
Elizabeth	Union	45	53	36.0	+5.5	65	3	1	13	45	3.15	−1.02	0.96	10.2	12	12	7	9	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§46	32.6	+3.8	63	8	−9	13	43	3.14	−0.40	1.02	11.0	11	18	4	6	w.	Hiram E. Deats.
Jersey City	Hudson	10	34	34.2	+3.6	63	8	10	10	31	2.99	−0.73	0.85	11.9	13	9	11	8	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	45	32.6	+2.2	61	8	4	13	32	2.87	−0.61	0.87	12.5	10	17	5	6	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§29	32.8	+3.2	61	8	−3	13	41	3.09	−0.38	1.00	10.0	10	15	2	11	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	79	33.7	+2.9	61	8	−3	13	40	2.78	−0.84	0.84	10.8	10	13	5	10	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	14	......	......	......	......	......	......	....	3.04	....	0.87	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	61	34.0	+3.8	64	8	5	13	49	4.07	−0.14	1.05	14.6	15	9	7	12	nw.	Philip Del Vecchio.
Plainfield	Union	120	44	32.8	+4.1	62	8	−2	13	34	3.10	−0.86	1.00	9.4	11	10	11	7	nw.	S. K .Pearson.
Ridgefield	Bergen	80	15	32.2	......	62	8	6	13	41	3.22	....	1.08	10.7	10	9	9	10	nw.	George P. Kirsten.
Somerville, (near)	Somerset	70	49	32.0	+3.1	63	8	−12	13	44	2.95	−0.83	0.92	10.7	12	14	3	11	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	14	......	......	......	......	......	......	....	3.01	....	0.76	... ..	11	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	62	33.8	+2.5	63	8	10	10	42	2.98	−0.84	0.81	11.5	12	10	6	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	33.0	+3.7	67	8	−12	13	49	3.21	−0.52	1.08	11.2	11	12	6	10	nw.	
The Southern Interior.																				
Bellcplain	Cape May	30	38	36.7	+5.2	65	8†	8	10	32	2.95	−0.64	1.20	......	10	6	3	19	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	49	35.8	+2.1	64	8†	11	13	35	2.96	−0.86	0.69	8.5	8	13	5	10	w.	Bennett K. Matlack
Burlington	Burlington	12	§46	35.6	+4.3	63	8	−1	13	46	3.74	+0.24	1.15	10.9	11	14	6	8	nw.	Public Service Power Co.
Camden	Camden	20	....	34.6	......	65	8	2	13	45	2.76	....	0.94	9.0	13	11	8	9	nw.	U. S. Weather Bureau.
Clayton	Gloucester	134	32	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	G. E. Lamb.
Freehold	Monmouth	194	¶27	34.6	......	63	8	5	13	43	3.96	−0.06	0.89	12.0	10	15	6	7	w.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§26	36.1	......	67	8	4	13	43	3.02	−0.39	0.83	7.0	9	17	5	6	nw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	38	34.6^{c}	+5.2	64	8	−1	13	47	3.49	−0.11	1.00	14.2	7	16	4	8	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	43	36.2	+4.4	66	8	3	13	48	3.93	+0.48	1.10	10.1	11	12	9	7	nw.	James M. Armstrong.
Lakewood	Ocean	54	28	35.2	+5.5	63	8	−1	13	41	3.48	−0.09	0.82	12.0	11	13	5	10	w.	R. W. Holman.
Moorestown	Burlington	......	69	33.8	+2.5	65	8	1	13	46	3.12	−0.36	0.93	9.0	10	11	4	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	25	......	......	......	......	......	......	....	4.35	+1.56	1.25	7.5	11	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	2	35.9	......	64	8	5	13	44	3.22	....	1.00	10.6	10	12	8	8	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§34	35.8	......	65	24	9	10	35	4.44	+1.63	1.07	......	12	14	5	9	w.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	....	......	......	......	......	......	......	....	3.87	....	0.98	6.0	8	8	12	8	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	8	32.9	......	64	8	−11	13	46	2.81	....	0.79	......	8	11	8	9	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	60	33.3	+2.6	62	8	6	14	42	2.66	−0.61	0.83	10.8	8	12	5	11	nw	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	7	......	......	......	......	......	......	....	3.24	....	1.09	12.4	11	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	39	36.8	+6.0	63	24	9	12	34	3.49	−0.17	1.16	5.0	9	14	6	8	nw.	John H. Brown.
Philadelphia, Pa	......	114	61	36.7	+2.8	63	24	14	12	42	3.19	−0.13	1.09	11.8	11	10	8	10	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	35.2	+4.2	67	8	−11	13	48	3.42	+0.05	1.25	9.7	10	13	6	9	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	43	35.2	+3.8	59	24	11	12	30	4.04	+0.54	1.00	13.0	12	17	5	6	nw.	Information Bureau.
Atlantic City	Atlantic	16	59	37.2	+3.6	64	24	15	6	26	4.72	+1.36	1.43	7.6	12	11	4	13	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	23	33.0	+2.6	67	8	1	13	43	3.49	−0.42	0.94	11.2	12	12	6	10	nw.	William D. Martin.
Sandy Hook	Monmouth	22	34	33.6	+3.0	57	8	13	10	33	2.55	−1.20	0.66	10.5	12	10	6	12	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	34.8	+3.2	67	8	1	13	43	3.70	+0.07	1.43	10.6	12	13	5	10	nw.	
For the State	......	......	....	33.5	+2.8	67	8	−12	13	50	3.33	−0.28	1.43	10.4	10	12	6	10	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for February, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	T.	.09		T.	.15			1.04			.50			.10	.08					.97					.22							3.15
Charlotteburg	Passaic		.02		.01	.10			.75	.06		.96			.10	.03					.87			.01		.06	.20						3.17
Culvers Lake	Delaware	T.		T.	T.	.15		T.	.69	.05		.72			.05	.08					.95	T.	T		.15	.15							2.99
Dover	Passaic	.05			T.	.35		*	1.13			1.00			.20	.09					1.17	T.		.02		.20							4.21
Layton	Delaware		T.		.04	.07			.75			.84			.20						1.01	T.				.29							3.20
Long Valley	Morris		.08		T.	.08			.88			.85			.09	.06					.98					.06	.11						3.19
Newton	Delaware	.03	.04		.02	.09		.13	.69	.03		.70			.03	.04					.93	T		T.		.06							2.79
Phillipsburg	...do	.23	.03		.04	.06		.57	.39		T.	.89			.11	.25					.99	T.		T.		.20	T.						3.75
Sussex	Hudson		.04		.04	.14			.84			.72			.06	.04					.18	T.				.14							2.20
The Red Sandstone Plain.																																	
Boonton ǁǁ	Passaic		.04			.11			1.03	T.		.65				.10					.91	.15					.21						3.20
Canoe Brook ǁǁ	Essex		.08			.12			.83	T.		.95				.13					1.06	T.		T.			.18						3.35
Chatham ǁ	...do		.13			.22			.89	.16		.67	.17			.29	.08				1.04	.47		.02			.12						4.26
Elizabeth	Coast	T.	.10		.14	.05			.61	.09		.80			.07	.09					.96	.01		T.		.11	.12						3.15
Flemington	Raritan	T.	.04		.10	.08		T.	.77	.04		.71			.08	.09					1.02	T.		T.		.11	.10						3.14
Jersey City	Coast	.03	.11		.18	.07		.22	.26			.85			.09	.10					.80	.01		.01		.26	T.						2.99
Lambertville	Delaware	T.			.30	.03		T.	.51	.03		.87			.03	.06					.80	T				.20	.04						2.87
Little Falls ǁǁ	Passaic		.08			.12	T.		.61	.02		.86				.14					.96	.04		.01			.25						3.09
New Brunswick	Raritan		.08		.17	.07			.57			.84			.02	.10					.77	T.		T.		.10	.06						2.78
New Milford ǁǁ	Hackensack		.10			.17			.68			.30				.22					.87	.41					.29						3.04
Paterson	Passaic		.08		.12	.30		.01	.72	.04		.95			.15	.10			.08		1.05	.02		.05		.25	.15						4.07
Plainfield	Raritan	.05			.13	.04		.25	.47			.80			*	.11					1.00	T.		.01		.24	T.						3.10
Ridgefield**	Hackensack	T.	.07		.10	.07		*	.70			.80			.06	.09					1.08	T.		T.		.25							3.22
Somerville	Raritan		.06		.12	.05		.01	.77	.01		.68			.05	.07					.92	T.		T.		.20	.01						2.95
Woodcliff Lake ǁǁ	Hackensack		.11			.17			.70	.02		.35	.03			.19	.03				.76	.32					.33						3.01
New York, N. Y***	Coast	.14	T.		.18	.07		.39	.12			.81			.09	.10					.78	.01		.01		.28	T.						2.98
The Southern Interior.																																	
Belleplain	Tuckahoe	.16	.24		.40	T.		*	.58	T.		T.			T.	.16			.03		1.20			.04		.14	T.						2.95
Bridgeton	Delaware	.07	.16		.55				.54			.69			T.	.50	T.	T.			.35			T.		.10							2.96
Burlington	Delaware	T.	.17		.33	.01			.83	.10		.76				.15			.02		1.15			.02		.20							3.74
Camden***	..do	.20	T.		.13	.02		.36	.12		.05	.68			T.	.12		T.	.01	.01	.93			.01		.12							2.76
Clayton	...do																																
Freehold	Raritan		.12		.40			.01	.89			.86			T.	.11		.50			.83			.01		.23							3.96
Hammonton	Mullica	T.	.10		.21	.08			.79	.02		.83				.08			T.		.78			T.		.13							3.02
Hightstown	Raritan		.14		.40				.80			1.00				.12					.81					.22							3.49
Indian Mills	Mullica	.04	.16		.38				1.00			1.10			.04	.16			.08		.75			.04		.18							3.93
Lakewood	Metedeconk	T.	.16		.40	.08		T.	.80	.05		.80				.10			.03		.82					.22	.02						3.48
Moorestown ǁǁ	Delaware		.22			.25	T.		.44			.93	T.			.03	.09		.02		.65	.22					.17						3.12
Northfield	Coast	.10	.17		.47			.05	.64	25		1.25				.20			.02		1.09						.11						4.35
Pemberton	Delaware	.01	.11		.40	.03		T.	.70	T.		1.00			.01	.08					.74	T.		T.		.14	T.						3.22
Pleasantville ǁǁ	Coast		.28			.60			.97	.15		1.07				.03	.02		.04		.48	.65		.03			.12						4.44
Port Norris	Maurice		.33		.45				.40	.57	.95					T.			.05		.98			T.		.14							3.87
Runyon	Coast		.10		.09	.05			.63			.79				.12					.76					.27							2.81
Trenton***	Delaware	.15	T.		.25	T.		.33	.05		T.	.83			T.	.10			T.		.76	T.		T.		.19	T.						2.66
Trenton No. 2ǁǁ	...do		.15			.21			.59	.04		1.08	.01			.05	.06				.66	.18	T.				.21	T.					3.24
Tuckerton	Coast	.17			.47	.08			.86			.42			.04	.27		.02			1.16												3.49
Phila., Pa***	Delaware	.16			.19	.03		.47	.09		T.	1.09			.01	.10		T.	.01	T.	.90	T.		T.		.14	T.						3.19
The Sea Coast.																																	
Asbury Park	Coast	.04	.06		.60	T		.12	.83			1.00			T.	.05			.22		.82	T.		.02		.26	.02						4.04
Atlantic City***	...do	.20	.01		.56	T.		.42	.52		.03	1.40			T	.20		T.	.04		1.16			.08		.10							4.72
Long Branch**	...do	.06	.03		.33	.01		.40	.42			.94			T.	.10		.01	.05		.84	T.		T		.30	T.						3.49
Sandy Hook***	...do	.07	.01		.28	.07		.39	.18			.48			.01	.11			T.		.66	T.		.03		.26							2.55

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, aud precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ǁǁ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following neasurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
tlantic City	30.05	30.81	10	29.40	8	18.0	51	nw.	8	70	60	63	67
amden	30.05	30.81	10	29.35	8	11.5	38	uw.	27	73	58	63	......
ong Branch	30.02	30.75	10	29.29	8	......	......	......	......	73	62	59	......
ew York, N. Y	30.00	30.76	10	29.30	8	18.9	60	nw.	21	70	60	58	58
hiladelphia, Pa	30.05	30.81	10	29.38	8	14.4	44	s.	7	61	51	55	62
idgefield	30.00	30.75	10	29.30	8	......	......	......	......	......	......	......	......
andy Hook	30.00	30.75	10	29.29	8	17.0	46	nw.	5	77	66	68	58
renton	30.03	30.80	10	29.34	8	10.9	37	w.	21	63	58	74	65

Daily Temperatures for February, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	43	54	48	35	29	29	41	56	45	22	38	30	28	37	38	37	41	52	47	44	43	47	57	57	51	35	40	42	....	....	....	41.8
	Minimum	23	38	30	23	21	9	19	36	9	6	17	3	−6	14	33	7	23	27	21	33	29	22	32	32	32	27	23	26	....	....	....	21.8
Charlotteburg	Maximum	42	54	50	35	35	26	40	59	54	19	32	37	40	40	41	33	45	46	44	47	45	46	56	54	47	38	32	41	....	....	....	42.1
	Minimum	16	37	31	12	18	12	23	23	4	4	14	3	10	15	39	13	23	34	36	28	21	28	30	38	27	13	18	23	....	....	....	21.2
Dover	Maximum	44	53	43	34	27	27	40	58	....	24	36	....	38	38	39	33	43	48	40	47	44	46	57	54	41	33	35	43	....	....	....	41.0b
	Minimum	20	36	29	22	13	8	17	24	6	5	7	4	−5	18	22	9	25	27	20	22	25	22	31	35	30	21	21	25	....	....	....	19.2
Layton	Maximum	43	64	40	34	25	26	40	55	30	22	35	30	37	37	38	35	46	46	41	45	42	45	48	52	37	34	34	40	....	....	....	39.0
	Minimum	16	34	30	19	14	1	13	30	2	1	13	0	−11	22	22	4	25	28	12	22	27	18	33	30	26	23	20	24	....	....	....	17.8
Long Valley	Maximum	41	52	48	36	29	25	39	58	40	19	33	22	31	37	38	33	40	48	44	45	43	42	55	55	52	34	34	42	....	....	....	39.8
	Minimum	19	37	30	21	19	9	15	35	8	6	16	5	−12	12	31	10	21	28	19	32	31	22	32	32	30	26	21	25	....	....	....	20.7
Newton	Maximum	45	57	54	36	33	26	39	59	44	30	33	33	33	40	45	36	40	59	50	57	45	43	60	59	51	36	37	43	....	....	....	43.7
	Minimum	24	37	29	21	14	6	17	27	4	3	7	4	2	18	24	9	22	29	20	30	27	19	30	33	28	22	19	22	....	....	....	19.5
Phillipsburg	Maximum	41	41	39	30	27	27	40	40	21	23	23	23	26	35	35	30	34	34	36	41	41	36	41	41	39	36	31	40	....	....	....	34.0
	Minimum	24	35	30	25	17	12	23	21	11	9	18	0	−6	14	28	9	29	29	24	35	29	24	35	32	33	26	25	28	....	....	....	22.1
Sussex	Maximum	43	49	48	34	27	30	39	45	44	18	30	30	36	36	35	34	37	43	44	44	43	43	56	55	48	31	30	39	....	....	....	38.9
	Minimum	21	38	33	22	20	8	18	34	6	5	16	4	−8	20	31	7	24	27	18	31	30	22	32	38	30	26	21	24	....	....	....	21.3
The Red Sandstone Plain.																																	
Boonton§§	Maximum	44	54	40	36	36	28	56	67	48	23	37	31	33	37	49	36	42	49	42	47	57	45	56	53	39	54	46	48	....	....	....	44.0
	Minimum	20	20	34	20	23	12	13	25	9	9	9	9	9	−3	24	13	15	27	25	27	34	24	26	33	29	31	23	27	....	....	...	20.2
Canoe Brook§§	Maximum	46	54	46	37	31	33	56	60	52	26	37	29	32	38	39	38	48	52	48	46	45	46	58	54	48	36	38	45	....	....	..	43.5
	Minimum	17	30	29	20	15	9	19	31	10	8	13	3	−11	8	30	1	18	28	16	32	33	23	30	28	28	29	22	26	....	....	....	19.5
Elizabeth	Maximum	49	57	51	44	35	31	49	65	57	21	42	41	35	44	44	41	45	59	55	53	55	49	63	64	59	46	40	47	....	....	....	47.9
	Minimum	24	41	32	24	17	13	22	38	12	10	20	9	1	18	33	13	23	31	30	36	35	23	32	35	33	30	21	22	....	..	....	24.2
Flemington	Maximum	43	59	47	34	30	30	42	63	45	24	39	31	34	37	38	36	49	63	44	46	45	48	61	60	52	37	42	49	....	....	....	43.5
	Minimum	22	39	32	24	20	8	17	35	11	7	18	3	−9	12	30	2	15	30	23	32	33	23	32	35	32	30	24	27	....	...	....	21.7
Jersey City	Maximum	46	54	41	36	27	28	61	63	32	26	38	27	33	40	41	36	45	53	44	50	47	44	59	55	41	36	40	46	....	....	....	41.9
	Minimum	32	40	32	26	20	13	28	32	11	10	20	12	15	30	26	19	28	36	31	37	32	26	35	38	32	29	23	27	....	....	....	26.4
Lambertville	Maximum	44	55	42	35	27	27	54	61	41	22	34	30	32	38	37	34	42	50	40	47	44	45	57	58	47	47	38	46	....	....	....	41.9
	Minimum	29	36	31	23	18	9	22	41	10	7	18	6	4	23	25	13	23	28	25	32	32	22	32	36	32	27	23	26	....	....	....	23.3
Little Falls§§	Maximum	46	56	46	37	30	31	58	61	51	24	39	32	38	39	40	38	46	54	45	48	46	48	58	55	46	35	38	47	....	....	....	44.0
	Minimum	22	28	34	23	21	11	17	30	10	9	12	8	−3	10	29	9	22	30	22	30	36	25	32	31	30	30	23	27	....	....	....	21.7
New Brunswick	Maximum	47	55	52	37	28	27	42	61	52	22	35	31	32	39	39	35	43	50	47	61	47	46	60	57	52	38	40	52	....	....	....	43.5
	Minimum	23	41	32	24	20	11	21	37	12	10	19	7	−3	19	32	8	22	33	27	34	34	23	32	35	37	30	22	26	....	....	....	23.9
Paterson	Maximum	44	55	51	41	28	27	43	64	59	22	31	30	34	37	40	34	43	50	45	47	46	45	58	54	47	35	38	46	....	....	....	42.6
	Minimum	27	41	34	26	21	12	23	37	10	9	18	10	5	23	29	17	27	35	28	33	34	26	34	39	32	27	24	28	....	....	....	25.3
Plainfield	Maximum	46	55	41	36	27	28	51	62	35	24	39	27	32	39	39	36	46	54	44	49	47	47	60	58	39	37	40	47	....	....	....	42.3
	Minimum	22	40	31	23	20	10	22	35	11	8	18	8	−2	17	30	16	21	31	27	32	32	25	32	34	31	29	23	27	....	....	....	23.3
Ridgefield	Maximum	46	54	41	32	24	26	52	62	23	21	37	28	33	37	40	35	46	52	41	51	47	44	61	56	36	34	38	46	....	....	....	40.8
	Minimum	26	36	31	26	14	12	23	21	12	11	21	10	6	23	23	15	26	32	27	35	28	24	34	38	32	24	23	27	....	....	...	23.6
Somerville	Maximum	45	56	45	33	28	29	44	63	47	23	36	29	32	37	39	36	46	52	42	47	47	48	59	59	46	37	41	47	....	....	....	42.6
	Minimum	21	40	32	22	18	8	20	37	13	9	19	0	−12	12	31	1	15	30	22	31	34	22	30	31	30	29	24	27	....	....	....	21.3
New York, N. Y.	Maximum	47	53	41	36	27	29	52	63	23	27	38	27	33	41	42	36	45	52	44	62	47	43	57	54	41	36	36	45	....	....	....	41.7
	Minimum	33	40	32	27	16	13	29	21	11	10	20	12	17	33	25	19	30	36	32	38	28	26	36	39	32	23	23	27	....	....	....	26.0
The Southern Interior.																																	
Belleplain	Maximum	50	57	45	38	31	30	45	65	47	32	35	41	41	47	43	39	63	54	48	54	51	42	63	65	50	46	43	51	....	....	....	46.6
	Minimum	23	40	26	29	19	11	27	39	23	8	25	13	9	32	32	17	29	38	27	39	34	21	35	35	35	31	25	27	....	....	....	26.8
Bridgeton	Maximum	47	58	50	33	30	33	45	64	31	31	35	28	40	45	42	39	46	64	50	51	50	47	62	64	46	44	42	50	....	....	....	45.2
	Minimum	27	38	29	25	20	14	25	29	15	15	22	12	11	32	31	19	28	36	27	37	33	24	35	36	36	31	25	28	....	....	.. .	26.4
Burlington	Maximum	49	58	55	40	30	30	44	63	59	26	37	34	35	43	40	36	45	53	52	52	49	49	60	61	56	40	41	49	....	....	....	45.9
	Minimum	24	40	34	25	22	15	21	40	13	13	22	14	−1	22	25	20	23	33	34	29	36	25	32	34	32	31	26	27	....	....	....	25.4
Camden	Maximum	51	61	48	35	28	30	55	65	28	26	36	25	36	41	40	37	44	52	48	53	47	47	62	63	41	38	41	50	....	....	....	43.9
	Minimum	26	39	32	26	19	16	27	20	14	14	21	5	2	26	28	21	28	34	29	37	32	24	36	37	33	28	26	28	....	....	....	25.3
Clayton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.. .	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	..	....	....	...	....	....	....	....	....	....	....	....	....	......
Freehold	Maximum	46	55	48	35	27	27	44	63	56	23	36	30	37	42	40	35	44	50	49	53	48	47	58	58	51	51	38	45	....	....	....	44.1
	Minimum	28	44	32	24	18	12	19	37	13	11	22	9	5	22	30	14	27	34	29	35	33	23	30	37	33	29	23	27	....	....	....	25.0
Hammonton	Maximum	50	59	55	37	29	28	45	67	58	29	37	27	40	44	40	37	46	64	49	53	57	49	62	63	51	47	47	51	....	....	....	46.8
	Minimum	23	39	30	24	20	9	22	39	15	12	20	8	4	34	34	18	29	35	25	35	32	22	33	36	31	30	25	27	....	....	....	26.4
Hightstown	Maximum	47	56	55	44	29	28	42	64	60	33	35	31	35	43	39	36	43	51	42	54	49	45	60	59	52	....	....	....	....	....	....	45.3c
	Minimum	24	40	31	23	19	11	21	38	13	10	20	7	−1	22	33	13	26	33	22	33	36	22	32	32	31	31	23	26	....	....	....	23.9
Indian Mills	Maximum	50	60	63	40	30	32	46	66	62	28	38	32	43	46	47	40	46	52	46	53	60	52	63	63	55	44	41	50	....	....	....	47.4
	Minimum	22	40	31	22	19	9	20	39	14	11	22	8	3	30	34	16	26	35	27	35	36	23	32	32	30	30	25	28	....	....	....	24.9
Lakewood	Maximum	48	56	52	37	31	30	45	63	55	25	37	31	40	44	42	37	45	62	42	54	50	44	60	60	53	43	40	47	....	....	....	45.1
	Minimum	22	43	33	23	22	12	18	39	14	12	22	11	−1	29	32	14	27	35	27	35	34	24	30	39	30	31	24	27	....	....	....	26.3
Moorestown	Maximum	49	59	43	32	29	30	64	65	26	26	34	24	36	44	39	36	43	51	46	53	48	47	61	61	41	37	40	49	....	....	....	43.0
	Minimum	26	37	30	20	19	14	24	19	13	14	21	6	1	27	26	20	27	35	28	38	31	25	35	36	33	28	25	28	....	....	....	24.5
Pemberton	Maximum	49	57	50	38	28	28	54	64	59	26	36	33	37	43	42	36	42	51	46	53	49	46	61	61	53	42	40	48	....	....	....	45.4
	Minimum	26	41	32	26	21	13	22	41	15	14	22	11	6	30	34	17	26	35	28	34	36	24	32	36	33	32	21	28	....	....	....	26.4
Pleasantville§§	Maximum	50	60	44	33	28	36	52	55	49	35	36	36	41	48	44	42	55	55	53	55	64	46	63	65	47	41	44	51	....	....	....	47.0
	Minimum	21	27	27	21	21	10	19	34	15	9	15	13	11	35	37	19	24	36	27	34	35	18	28	33	28	34	26	29	....	....	....	24.8
Runyon	Maximum	48	54	42	36	32	34	42	64	56	26	32	32	32	38	40	34	45	54	40	54	48	46	62	61	51	40	48	54	....	....	....	44.6
	Minimum	14	30	30	15	26	11	27	38	10	7	17	8	−11	22	32	3	26	26	23	33	22	21	31	31	27	23	26	26	....	....	....	21.2
Trenton	Maximum	48	56	42	31	29	29	54	62	23	24	34	24	34	41	39	35	44	51	43	52	46	44	60	59	41	36	39	46	....	....	....	41.6
	Minimum	29	38	31	24	18	14	26	20	13	12	20	11	6	26	26	19	27	36	29	36	30	25	35	38	35	24	24	28	...	....	....	25.0
Tuckerton	Maximum	51	60	44	40	33	30	46	56	46	30	28	28	40	48	48	40	48	50	51	54	52	40	62	63	52	40	44	60	....	....	....	45.5
	Minimum	37	41	35	27	20	16	31	32	12	16	10	9	19	36	35	24	32	34	33	40	37	20	39	43	32	21	27	29	....	....	....	28.1
Philadelphia, Pa.	Maximum	50	60	43	34	31	31	55	62	25	27	37	26	36	46	45	37	43	54	51	62	50	44	63	63	45	40	41	50	....	....	....	44.3
	Minimum	37	40	34	27	21	17	31	20	16	16	24	14	19	36	29	24	32	40	33	40	34	26	38	42	39	29	27	31	....	....	....	29.1
The Sea Coast.																																	
Asbury Park	Maximum	48	57	48	34	31	31	45	54	38	26	24	27	39	44	40	38	46	54	44	63	49	39	58	59	46	43	40	47	....	....	....	43.3
	Minimum	30	42	34	26	22	12	24	24	15	12	23	11	13	33	30	16	26	37	35	39	34	26	37	41	38	29	25	28	....	....	....	27.2
Atlantic City	Maximum	51	59	45	34	31	36	50	51	28	31	36	28	41	49	47	38	48	63	44	53	61	41	62	64	48	40	44	51	....	....	....	44.8
	Minimum	38	42	30	27	20	15	36	25	16	15	24	16	26	40	29	23	36	35	32	40	31	27	41	41	40	29	26	29	....	....	....	29.6
Long Branch	Maximum	45	55	45	35	28	27	46	67	25	24	29	24	31	43	39	37	44	63	41	54	47	40	61	57	40	37	40	46	....	....	....	41.4
	Minimum	24	37	30	23	17	10	24	24	12	11	21	10	1	26	27	19	29	33	32	39	31	24	32	39	34	25	24	27	....	....	....	24.6
Sandy Hook	Maximum	44	51	42	33	28	28	52	57	24	26	34	25	32	37	38	35	41	49	40	50	46	39	54	52	40	38	38	44	....	....	....	39.9
	Minimum	33	38	33	28	17	15	27	24	14	13	24	14	17	29	26	21	30	36	34	40	29	27	37	39	35	26	26	30	....	....	....	27.2

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	. ..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	. ..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

551.05
UNNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVIII. March, 1933. No. 3.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month as a whole was cloudy and wet, with the average temperature a little below normal, especially in the northern half of the State. In the extreme southern portion the majority of the days were above normal in temperature, with precipitation somewhat deficient. The highest points reached were near the 60-degree mark and were recorded on the 17th, while the lowest ranged between ten and twenty degrees and occurred on the 11th.

The occurrences of precipitation were at rather regularly recurring periods, each succeeding one being heavier in amount. These periods, varying from one to four days in length, centered on the 2d, 7-8th, 13-15th, 18th-21st, and 26th. The climax was reached during the period from the 18th to 21st when the total fall ranged between two and three inches at the great majority of the stations. The monthly average for the State was about 131% of normal, ranging from 119% for the Southern Interior to 140% in the Highlands. Only a few stations in the extreme south did not receive normal precipitation. The tendency so far this year has been toward more abundant moisture, January being below normal, February about normal, March above normal, and, at the present writing, April 20th, decidedly in excess of normal for that portion of April. Seeding and other field work has accordingly been greatly delayed. Snow occurred in light amounts on several dates, except along the southern sea coast where there was none. The heaviest falls were from three to four inches in the Highlands, but none remained long on the ground.

The only damage reported by wind was that during the early morning of the 20th when a $35,000 residence at Sea Bright was washed out to sea. It had been greatly damaged in a previous storm.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 38.2°, which was 0.9° below normal. The highest temperature was 70° at Belleplain on the 14th, and the lowest, 8°, at Culvers Lake on the 11th. The greatest daily range of temperature was 41° at Belleplain on the 7th. The highest monthly mean temperature was 42.0° at Tuckerton, and the lowest, 34.1° at Layton.

The temperature departure from the normal for the year, 1933, to date, by sections, is: The Highlands, +4.1°; Red Sandstone Plain, +1.0°; Southern Interior, +4.1°; Sea Coast, +4.4°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 4.91 inches, which was 1.16 inches above normal. The average total snowfall at 20 selected stations was 1.7 inches. The greatest monthly precipitation was 6.34 inches, at Belvidere, and the least, 2.59 inches at Port Norris. The greatest amount of precipitation in any 24 consecutive hours was 1.78 inches at Ridgefield on the 7-8th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 2 more than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands. —0.42 inch; Red Sandstone Plain, —1.42 inches; Southern Interior, +0.29 inch; Sea Coast, —0.10 inch.

WIND.

The prevailing wind direction was from the Northwest. The wind movement averaged 15 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 47 miles per hour from the West at Atlantic City on the 9th.

MISCELLANEOUS.

The per cent of possible sunshine was 49, or 12 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 29.96 inches, or 0.05 inch below normal. The highest reading was 30.51 inches at Camden on the 16th, and the lowest 29.05 inches at Ridgefield on the 8th.

The mean stage of the Delaware River at Phillipsburg was 5.4 feet, and the highest 10.8 feet on the 23d. The mean stage at Trenton was 3.3 feet, and the highest 6.3 feet on the 23d.

Dense fog occurred quite generally in the southern part of the State on the 14th and 15th. Thunderstorms occurred generally on the 14th, 15th and 21st. Sleet fell at most stations in the north on the 19th. It was experienced over widely scattered areas in the south on the 2d, 8th, 19th, 23d and 26th.

Hail was observed at Atlantic City on the 9th.

COMPARATIVE DATA FOR MARCH

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	30.4	−8.7	66	2	1.10	−2.68	2.29	0.23	......	....	....	....	....
1886	37.7	−1.4	70	9	3.70	−0.08	5.27	2.59	......	....	....	....	....
1887	37.7	−1.4	61	8	3.34	−0.44	5.45	2.19	......	10	....	....	....
1888	32.8	−6.3	72	0	5.71	+1.93	8.22	3.75	......	11	....	....	....
1889	40.5	+1.4	67	19	3.79	+0.01	6.49	1.98	......	8	....	....	....
1890	37.6	−1.5	78	0	6.08	+2.30	7.92	4.14	......	14	....	....	....
1891	37.2	−1.9	68	4	5.06	+1.28	8.02	2.05	......	12	8	10	13
1892	34.4	−4.7	64	6	4.75	+0.97	7.21	3.11	......	9	10	12	9
1893	37.0	−2.1	68	6	3.73	−0.05	6.26	2.36	.....	10	10	10	11
1894	44.2	+5.1	83	12	1.77	−2.01	2.65	1.09	.....	10	12	11	8
1895	36.7	−2.4	72	7	3.16	−0.62	4.66	1.77	4.0	10	12	8	11
1896	34.0	−5.1	69	−8	5.34	+1.56	7.38	3.14	13.2	11	13	8	10
1897	40.0	+0.9	77	18	2.78	−1.00	4.32	1.55	1.6	10	11	9	11
1898	45.1	+6.0	77	16	3.33	−0.45	4.25	2.56	3.0	12	9	10	12
1899	38.6	−0.5	73	13	6.54	+2.76	9.58	3.45	5.4	13	7	10	14
1900	35.6	−3.5	67	−9	3.51	−0.27	4.96	2.48	7.0	10	12	12	7
1901	39.2	+0.1	75	−8	4.64	+0.86	8.07	2.40	0.9	12	9	10	12
1902	43.9	+4.8	77	0	4.34	+0.56	7.20	3.16	5.7	11	12	10	9
1903	47.6	+8.5	79	13	5.13	+1.35	8.53	3.60	*T.*	10	11	8	12
1904	37.2	−1.9	72	1	3.43	−0.35	4.76	2.02	4.5	13	11	8	12
1905	39.8	+0.7	87	−7	3.95	+0.17	5.06	2.80	2.6	12	14	8	9
1906	34.4	−4.7	62	−15	5.09	+1.31	6.77	2.91	11.2	11	10	9	12
1907	41.2	+2.1	88	−11	3.04	−0.74	4.38	1.81	11.5	10	13	10	8
1908	41.8	+2.7	89	7	2.80	−0.98	4.92	1.06	3.5	12	11	9	11
1909	38.3	−0.8	74	−6	3.48	−0.30	4.66	2.31	4.6	13	12	10	9
1910	44.5	+5.4	88	10	1.22	−2.56	2.36	0.29	1.1	6	14	10	7
1911	37.6	+1.5	76	3	3.38	−0.40	4.50	2.64	5.3	11	10	12	9
1912	36.9	−2.2	72	3	7.61	+3.83	9.61	5.95	6.6	14	9	11	11
1913	44.8	+5.7	79	1	5.15	+1.37	7.73	2.47	0.1	12	10	9	12
1914	35.4	−3.7	75	−6	3.65	−0.13	6.45	2.02	20.5	10	13	10	8
1915	36.1	−3.0	63	11	1.13	−2.65	1.65	0.58	7.4	3	20	7	4
1916	31.7	−7.4	71	−7	3.48	−0.30	4.96	2.38	19.3	12	13	8	10
1917	38.2	−0.9	72	0	4.65	+0.87	7.14	2.28	9.8	13	12	8	11
1918	41.8	+2.7	82	8	2.06	−1.72	3.76	0.99	0.7	9	17	7	7
1919	43.2	+4.1	77	12	5.32	+1.54	7.40	3.77	1.6	13	14	7	10
1920	39.4	+0.3	79	−8	3.80	+0.02	5.36	2.29	5.6	10	17	5	9
1921	49.1	+10.0	92	11	3.03	−0.75	4.65	1.80	*T.*	11	14	10	7
1922	41.1	+2.0	82	2	4.52	+0.74	7.10	3.42	3.7	13	12	6	13
1923	38.0	−1.1	81	−3	4.09	+0.31	6.73	2.13	6.3	10	17	6	8
1924	38.8	−0.3	76	5	2.51	−1.27	5.69	0.80	2.7	8	16	6	9
1925	43.3	+4.2	80	1	3.47	−0.31	6.09	1.50	0.3	9	16	6	9
1926	35.1	−4.0	79	0	2.25	−1.53	3.15	1.52	0.4	7	16	9	6
1927	41.9	+2.8	81	9	1.46	−2.32	2.73	0.78	0.3	10	14	7	10
1928	38.3	−0.8	82	6	2.84	−0.94	3.82	1.70	4.9	10	14	8	9
1929	44.9	+5.8	81	5	3.07	−0.71	4.92	1.92	0.7	11	15	6	10
1930	40.0	+0.9	78	9	2.54	−1.24	3.80	0.44	0.1	7	16	7	8
1931	39.2	+0.1	64	12	4.14	+0.36	6.06	2.60	2.0	10	8	9	14
1932	36.6	−2.5	69	3	5.49	+1.71	7.70	3.91	2.5	9	14	6	11
1933	38.2	−0.9	70	8	4.94	+1.16	6.34	2.59	1.7	13	10	7	14
Period	39.1	....	92	−15	3.78	....	9.61	0.23	4.8	11	12	9	10

W. B. O. Philadelphia 4-26-33 850.

Climatological Data for March, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	38.6^h	+0.5	61	17	14	11	28^h	6.34	+2.49	0.91	1.8	....	13	4	14	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	35.0	−0.8	58	17†	10	11	30	5.19	+0.99	1.38	0.7	11	11	8	12	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	8	11	....	4.88	+1.41	1.35	6.3	10	11	8	12	nw.	Brice E. Riker.
Dover	Morris	600	49	35.4	+0.2	59	17	13	11	27	4.71	+0.72	1.26	5.0	13	4	10	17	......	William C. Harris
Layton	Sussex	480	32	34.1	−1.5	63	17	10	11	36	4.86	+1.49	1.19	4.5	13	8	3	20	ne.	A. M. Depue.
Long Valley	Morris	520	3	35.8	......	55	18	13	11	24	4.70	....	1.38	......	13	10	3	18	w.	S. N .Dilts.
Newton	Sussex	769	50	37.4	+1.9	59	17†	10	11	34	5.30	+1.73	1.42	3.0	13	9	4	18	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	35.0	−3.1	48	7	16	11	17	6.00	+2.46	1.44	2.7	15	9	7	15	......	Town Engineer.
Sussex	Sussex	442	38	35.2	−1.1	60	17†	12	11	31	4.01	+0.42	1.25	1.0	12	10	3	18	......	A. J. W. Mowatt
Means and extremes	......	......	....	35.8	−0.6	63	17	8	11	36	5.11	+1.46	1.44	3.1	12	9	6	16	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	36.6	0.0	58	17	14	11	32	4.07	+0.13	1.12	......	8	14	5	12	nw.	John Kline.
Canoe Brook	Essex	173	3	36.6	......	58	17	15	11	31	4.85	....	1.49	......	10	11	7	13	w.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	......	......	......	......	....	6.04	+2.30	1.46	......	14	11	6	14	......	Paul Molitor. Sr.
Elizabeth	Union	45	54	39.0^a	+0.2	60	17	16	11	28	4.65	+0.43	0.95	1.6	16	13	5	13	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§47	38.7	−1.4	63	17	15	11	33	5.26	+1.37	1.11	4.5	14	15	3	13	nw.	Hiram E. Deats.
Jersey City	Hudson	10	35	38.4	−0.8	59	17	15	11	27	5.91	+1.76	1.26	3.3	14	9	8	14	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	46	37.2	−2.2	59	17	13	11	27	5.12	+1.09	0.95	6.0	13	11	7	13	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	37.4	−0.6	60	17	14	11	32	4.93	+1.34	1.51	1.5	13	13	4	14	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	38.1	−0.7	59	8†	15	11	27	5.32	+1.51	0.94	3.5	13	11	9	11	w.	N. J. Experiment Station
New Milford‡‡	Bergen	......	15	......	......	......	......	......	......	....	5.50	....	1.22	......	13	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	38.2	−0.6	59	17	15	11	25	5.78	+1.40	1.38	0.3	13	7	8	16	nw.	Philip Del Vecchio.
Plainfield	Union	120	45	37.5	−1.3	61	17	14	11	34	4.74	+0.47	1.18	2.3	16	9	8	14	nw.	S. K .Pearson.
Ridgefield	Bergen	80	16	37.9	......	61	17	15	11	28	5.65	....	1.78	4.5	14	7	8	16	nw.	George P. Kirsten.
Somerville, (near)	Somerset	70	50	37.8	−0.4	61	17	14	11	30	4.40	+0.44	0.85	2.3	14	11	3	17	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	......	....	5.75	....	1.40	......	14	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	63	38.0	+0.3	57	17	15	11	23	5.89	+2.25	1.50	3.1	14	6	10	15	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	37.8	−0.8	63	17	13	11	34	5.20	+1.11	1.78	3.0	13	11	6	14	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	40.4^c	−0.7	70	14	16	11	41^c	2.69	−1.01	0.90	T.	10	5	5	21	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	50	40.2	−2.1	64	14	17	11	33	4.07	−0.11	0.91	T.	11	13	5	13	nw.	Bennett K. Matlack
Burlington	Burlington	12	§47	40.2	−0.2	60	17	21	10	31	6.15	+2.44	1.27	0.8	14	10	12	9	n.	Public Service Power Co.
Camden	Camden	20	1	40.4	......	62	17	18	11	28	4.47	....	1.35	3.4	12	6	9	16	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	38.0	......	59	17	16	11	29	6.02	+1.37	1.22	T.	15	13	1	17	nw.	Moreau Plant Co.
Hammonton (near)	Atlantic	80	§27	40.2	......	65	13	17	11	36	4.33	+0.74	0.81	1.5	13	13	6	12	sw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	38.5	−1.9	59	17	15	17	24	5.56	+1.52	1.02	T.	12	10	8	13	nw.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	39.6	−0.9	63	17	16	11	35	5.33	+1.30	0.96	2.0	14	9	6	16	nw.	James M. Armstrong.
Lakewood	Ocean	54	29	39.2	−0.4	61	17	16	11	32	5.38	+1.40	0.93	T.	16	10	6	15	nw.	R. W. Holman.
Moorestown	Burlington	......	70	39.5	+0.3	61	17	17	11	27	5.12	+1.36	1.19	1.2	12	8	8	15	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	3.10	−0.39	0.55	......	13	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	39.8	......	61	17	17	11	31	4.72	....	0.79	0.5	13	9	3	19	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	40.0	......	64	15	14	11	36	3.52	+0.05	0.75	......	12	19	5	7	nw.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	2.59	....	0.60	T.	10	7	15	9	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	37.9	......	62	31	13	11	37	5.59	....	1.04	......	12	15	9	7	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	38.6	−0.5	59	17	17	11	26	5.59	+2.19	1.42	3.2	15	6	9	16	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	..	......	......	....	5.70	....	1.27	2.9	15	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	42.0	+2.0	60	15	23	10	23	2.77	−1.48	0.92	T.	14	10	7	14	nw.	John H. Brown.
Philadelphia, Pa	......	114	62	41.4	+0.6	60	17	20	11	24	4.86	+1.47	1.25	0.7	12	6	6	19	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	39.6	−0.5	70	14	13	11	41	4.59	+0.72	1.42	1.0	13	10	7	14	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	39.4	+0.4	61	17	17	11	27	6.29	+2.06	1.42	T.	15	20	4	7	nw	Information Bureau.
Atlantic City	Atlantic	16	60	41.0	+2.4	61	15	18	11	26	3.44	−0.16	0.89	T.	15	8	6	17	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	38.4	−0.1	63	17	16	11	30	6.29	+1.95	1.32	1.0	14	8	7	16	nw.	William D. Martin.
Sandy Hook	Monmouth	22	35	38.2	+1.2	56	17	18	11	22	4.79	+0.75	1.07	0.5	16	8	9	14	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	39.2	+1.0	63	17	16	11	30	5.20	+1.15	1.42	0.4	15	11	6	14	nw.	
For the State	......	......	....	38.2	−0.9	70	14	8	11	41	4.94	+1.16	1.78	1.7	13	10	7	14	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T. precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for March, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	....	T.	....	....	....	.38	.91	....	....	....	....	....	.29	.90	.50	....	....	.10	*	*	*	*	*	*	*	3.20	....	....	....	....	.06	6.34
Charlotteburg	Passaic	....	....	....	....	....	....	.10	1.20	....	....	....	....	.26	.79	.40	....	....	....	.53	.85	.50	....	....	....	....	.43	.03	.10	....	....	....	5.19
Culvers Lake	Delaware	T.	.05	....	T.	....	....	.10	.75	....	....	....	....	.10	.57	.36	....	....	T.	.50	.76	1.35	T.	T.	....	....	.34	....	T.	....	....	T.	4.88
Dover	Passaic	....	T.	....	....	....	....	.75	.51	....	....	....	....	.51	.22	.18	....	....	.50	.60	.40	.48	....	T.	....	*	.37	....	.03	....	....	.16	4.71
Layton	Delaware	T	.02	....	....	....	....	.20	.67	....	....	....	....	.12	.37	.43	....	....	.01	*	1.35	1.19	.05	....	....	....	.33	....	T.	....	....	.12	4.86
Long Valley	Morris	....	.03	....	....	....	....	.40	.98	....	....	....	....	.15	.70	.18	....	....	.25	.80	.68	.20	.07	T.	....	....	.23	.03	....	....	....	T.	4.70
Newton	Delaware	T.	.11	T.	....	....	....	....	.75	....	T.	....	....	.30	.73	.33	....	....	.03	.52	.75	1.42	....	.04	....	....	.26	....	.04	....	....	.02	5.30
Phillipsburg	...do	T.	.14	....	T.	....	....	.65	.16	....	....	....	....	.77	.21	.53	....	....	.04	.81	.76	1.44	....	.04	....	.18	.15	....	.03	....	....	.09	6.00
Sussex	Hudson	....	T.	....	....	....	....	.04	.59	....	....	....	....	.10	.40	.40	....	....	.03	.40	.67	1.25	.02	....	....	....	.07	....	.04	....	....	....	4.01
The Red Sandstone Plain.																																	
Boonton‖	Passaic	....	T.	T.	....	....	....	....	1.12	....	T.	....	....	....	.70	.15	....	....	....	T.	.70	.90	.15	....	....	....	.29	.06	....	T.	....	....	4.07
Canoe Brook‖	Essex	....	.07	T.	....	....	....	....	1.49	T.	....	....	....	....	.83	.10	T.	....	....	.13	1.02	.77	.06	....	T.	....	.33	.05	T.	T.	....	....	4.85
Chatham‖	...do	....	.09	.12	....	....	....	....	1.46	....	T	....	....	....	.81	.09	.18	....	....	.32	.92	1.07	.39	....	.03	....	.14	.21	....	.21	....	....	6.04
Elizabeth	Coast	....	.07	....	....	....	....	.20	.75	.02	T.	....	....	.37	.54	.13	....	....	.07	.75	.79	.43	....	.01	....	....	.42	.01	.04	....	....	.05	4.65
Flemington	Raritan	....	.03	....	....	....	....	.24	.87	....	....	....	....	.44	.61	.19	....	....	.11	.68	.96	.59	....	.02	....	T	.41	....	.08	....	....	.03	5.26
Jersey City	Coast	T.	.16	T.	....	....	....	1.10	.16	T.	....	....	....	.43	.34	.22	....	....	.10	.82	1.20	.80	....	T.	....	.04	.39	T.	.03	....	....	.12	5.91
Lambertville	Delaware	....	.10	....	....	....	....	.24	.65	T.			....	.54	.54	.15	....	....	.05	.95	.78	.55	....	.08	....	....	.43	....	.06	....	....	....	5.12
Little Falls‖	Passaic	....	.03	.91	....	....	....	....	1.51	....	....	....	....	....	.80	.19	.04	....	....	.05	.98	.75	.18	....	....	....	.37	.01	....	.01	....	....	4.93
New Brunswick	Raritan	....	.16	....	....	....	....	.15	.78	....	....	....	....	.37	.65	.20	....	....	T.	.86	.94	.70	....	.01	....	....	.40	T	.05	....	....	.05	5.32
New Milford‖	Hackensack	....	.06	.03	....	....	....	....	1.22	.23	....	....	....	....	.80	.27	....	....	....	.08	.83	1.22	.30	....	....	....	.28	.12	....	.06	....	....	5.50
Paterson	Passaic	T.	.10	....	....	....	....	.18	1.38	T.	T.	....	....	.35	.57	.35	....	....	.40	.35	1.05	.65	....	T.	....	....	.33	T.	.03	....	....	.04	5.78
Plainfield	Raritan	T.	.09	....	....	....	....	....	1.18	.02	T.	....	....	.45	.33	.05	....	....	.08	.84	.70	.50	T.	.01	....	.08	.30	....	.03	....	....	.08	4.74
Ridgefield**	Hackensack	T.	.17	....	....	....	....	....	1.78	....	....	....	....	.18	.60	.14	....	....	....	.31	.71	1.08	....	.01	....	.03	.41	....	.05	....	....	.18	5.65
Somerville	Raritan	....	.05	....	....	....	....	.21	.64	....	....	....	....	.71	.28	.12	....	....	.01	.77	.67	.48	....	.01	....	....	.34	....	.06	....	....	.05	4.40
Woodcliff Lake‖	Hackensack	....	.15	.04	....	....	....	....	1.40	.18	....	....	....	....	.89	.24	.08	....	....	.09	.85	1.03	.32	....	....	....	.39	.05	....	.04	....	....	5.75
New York, N. Y***	Coast	T	.15	T.	....	....	....	1.08	.16	T.	....	....	....	.68	.08	.23	....	....	.10	.88	1.14	.76	....	T.	....	.23	.19	....	.03	....	....	.18	5.89
The Southern Interior.																																	
Belleplain	Tuckahoe	....	.02	....	....	....	....	.20	.18	....	....	....	....	....	.20	.10	....	....	....	.90	.30	.45	....	.03	T.	....	.31	T.	....	....	....	T.	2.69
Bridgeton	Delaware	....	T	....	....	....	....	.21	.31	....	....	....	....	.31	.44	.91	....	....	.14	.40	.65	.41	....	.03	....	....	.26	....	....	....	....	T.	4.07
Burlington	Delaware	....	.05	.03	....	....	....	.22	.59	....	....	....	....	.55	.72	.35	....	....	.10	.73	1.27	.92	....	.07	....	....	.53	T.	....	....	....	.02	6.15
Camden***	..do	....	.02	....	....	....	....	.61	T.	T.	....	....	....	.94	....	.32	....	....	.04	.56	.91	.52	....	.09	....	.20	.18	....	T.	....	....	.08	4.47
Freehold	Raritan	T.	.08	....	....	....	....	.21	.72	....	....	....	....	.42	.60	.45	....	....	....	1.22	.78	.79	....	.08	.03	....	.46	.04	.06	....	....	.08	6.02
Hammonton	Mullica	....	.03	....	....	....	....	.09	.39	T.	....	....	....	.28	.62	.52	....	....	.02	.77	.81	.40	....	.09	....	....	.26	....	T.	....	....	.05	4.33
Hightstown	Raritan	....	.12	....	....	....	....	.15	.63	....	....	....	....	.30	.80	.45	....	....	....	1.02	.78	.65	....	.08	....	....	.55	....	....	.03	....	....	5.56
Indian Mills	Mullica	....	.07	....	....	....	....	.24	.45	....	....	....	....	.76	.63	.45	....	....	T.	.64	.96	.40	....	.16	....	....	.40	.06	.03	....	....	.08	5.33
Lakewood	Metedeconk	T.	.14	....	....	....	....	.16	.36	.03	....	....	....	.23	.67	.55	....	....	.07	.60	.85	.93	....	.10	....	....	.52	.05	.04	....	....	.08	5.38
Moorestown‖	Delaware	....	.05	T.	....	....	....	....	.80	....	....	....	....	....	1.08	.33	.04	....	....	.34	.74	1.19	.11	....	.13	....	.29	.02	....	....	....	....	5.12
Northfield	Coast	T	.02	....	....	....	....	.12	.10	....	....	....	....	.11	.34	.18	....	....	.21	.54	.47	.55	....	.02	....	....	.19	....	....	....	....	.25	3.10
Pemberton	Delaware	....	.04	....	....	....	....	.15	.42	....	....	....	....	.37	.57	.58	....	....	.06	.44	.79	.68	....	.14	....	....	.47	....	T.	....	....	.01	4.72
Pleasantville‖	Coast	....	.01	T.	....	....	....	....	.32	.04	....	....	....	....	.64	.25	....	....	....	.24	.75	.58	.35	....	.05	....	.26	.03	....	T.	....	....	3.52
Port Norris	Maurice	....	....	....	....	....	....	....	.51	....	....	....	....	....	.23	.17	....	....	.10	.50	.45	.18	....	.02	....	....	.33	....	....	....	....	.10	2.59
Runyon	Coast	....	.11	....	....	....	....	.12	.56	....	....	....	....	.12	.90	.42	....	....	....	.98	1.04	.71	....	.07	....	....	.48	....	.08	....	....	....	5.59
Trenton***	Delaware	.02	.10	....	T.	....	....	.73	T.	.02	T.	....	....	1.12	T.	.30	....	....	.04	1.02	1.01	.60	....	.06	....	.10	.36	....	.01	....	....	.10	5.59
Trenton No. 2‖	...do	....	.08	.01	....	....	....	....	.89	.01	....	....	....	....	1.16	.21	.02	....	....	.20	1.04	1.27	.17	T.	.09	....	.46	.08	....	.01	....	....	5.70
Tuckerton	Coast	.02	.02	....	....	....	....	.22	....	....	....	....	....	.12	.20	.16	....	....	.02	.92	.48	.38	....	.09	....	....	.06	....	.02	....	....	.06	2.77
Phila., Pa***	Delaware	....	.04	....	....	....	....	.78	....	....	....	....	....	1.08	....	.23	....	....	.05	.73	1.01	.45	....	.11	....	.21	.10	....	T.	....	....	.07	4.86
The Sea Coast.																																	
Asbury Park	Coast	T.	.05	....	....	....	....	.30	.15	.07	....	....	....	.45	.10	.50	....	....	.05	1.42	1.18	1.15	....	.30	....	T.	.55	....	.02	....	....	.11	6.29
Atlantic City***	...do	T.	.01	....	....	....	....	.20	.01	.04	....	....	....	.43	.15	.15	....	....	.22	.77	.54	.56	....	.03	....	.22	.03	....	T.	....	....	.08	3.44
Long Branch**	...do	T.	.10	....	....	....	....	.50	T.	T.	....	....	....	.80	.03	.53	....	....	.05	1.32	1.05	1.01	T.	.12	....	.29	.26	....	.06	....	....	.17	6.29
Sandy Hook***	...do	T.	.05	....	....	....	....	.61	.12	.01	T	....	....	.75	.02	.43	....	....	.01	.90	.67	.51	....	.01	....	.27	.21	....	.03	....	....	.19	4.79

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	29.98	30.46	16	29.18	8	17.6	47	w.	9	70	60	67	59
Camden	29.98	30.51	16	29.16	8	12.4	39	w	9	70	57	64	......
Long Branch	29.96	30.10	16	29.08	8	......	......	......	......	73	65	68	43
New York, N. Y	29.94	30.44	16	29.05	8	18.2	56	nw.	9	70	61	65	48
Philadelphia, Pa	29.98	30.51	16	29.16	8	15.3	39	w.	9	66	54	58	41
Ridgefield	29.94	30.45	16	29.05	8	......	......	......	......	......	......	......	......
Sandy Hook	29.94	30.45	16	29.08	8	17.2	41	nw.	10	77	72	75	47
Trenton	29.96	30.48	16	29.10	8	11.4	34	w.	9	73	62	67	48

Daily Temperatures for March, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	48	42	46	46	43	42	47	49	45	40	40	45	43	49	47	46	61	55	....	....	....	....	....	....	....	....	50	47	51	59	52	47.3h
	Minimum	31	29	33	29	30	30	37	39	33	19	14	21	33	35	36	23	31	32	....	....	....	....	....	....	....	....	29	28	32	31	30	29.8h
Charlotteburg	Maximum	43	36	41	43	44	42	41	46	44	40	29	44	52	41	40	41	58	58	48	39	39	40	38	41	45	45	44	43	44	50	51	43.5
	Minimum	29	26	30	29	27	19	25	34	33	16	10	18	31	30	32	21	29	30	30	29	31	31	31	23	19	30	28	23	29	30	21	26.6
Dover	Maximum	44	39	44	44	40	44	43	48	44	33	31	43	50	41	41	42	59	48	41	35	40	42	42	45	45	38	44	43	48	54	47	43.3
	Minimum	31	27	31	21	24	20	29	38	32	17	13	21	33	34	26	22	32	31	29	29	32	32	31	25	21	32	29	26	30	29	26	27.5
Layton	Maximum	43	41	44	42	38	39	39	37	42	35	32	45	46	43	41	45	63	50	34	35	38	42	40	42	47	38	46	42	45	54	36	42.1
	Minimum	27	28	32	30	25	14	25	34	30	15	10	16	32	32	30	21	27	35	20	29	32	32	30	24	15	31	32	22	30	27	21	26.1
Long Valley	Maximum	43	39	43	42	43	43	38	51	43	40	29	42	44	48	42	40	33	55	41	45	41	40	40	41	44	39	44	45	45	53	45	42.9
	Minimum	31	27	32	31	27	21	29	37	33	22	13	19	31	33	32	22	30	31	30	30	31	29	31	32	26	31	33	25	31	30	28	28.6
Newton	Maximum	48	44	49	49	46	43	49	49	40	34	32	50	46	45	53	44	59	50	49	35	46	44	48	47	56	47	46	52	56	59	52	47.3
	Minimum	29	29	30	29	26	18	29	34	34	14	10	21	33	30	30	30	29	31	28	28	30	32	30	24	22	29	31	29	28	30	28	27.6
Phillipsburg	Maximum	37	39	44	39	36	38	48	47	42	36	27	40	41	42	42	35	45	45	42	37	39	39	36	35	35	37	37	36	41	45	44	39.5
	Minimum	28	30	35	32	29	24	32	40	35	19	16	25	31	36	35	25	33	31	33	33	35	34	33	29	25	33	33	30	32	32	32	30.6
Sussex	Maximum	37	40	39	38	42	42	42	41	41	41	30	45	44	40	39	47	60	60	38	35	39	38	38	37	43	43	43	43	41	52	50	42.2
	Minimum	30	28	33	31	27	20	28	35	31	17	12	18	32	33	34	23	29	30	30	30	32	33	33	27	20	32	31	27	32	32	26	28.3
The Red Sandstone Plain.																																	
Boonton§§	Maximum	49	41	44	47	50	44	49	48	49	36	31	43	51	42	56	42	58	48	35	36	42	42	39	44	46	39	48	48	49	53	48	45.1
	Minimum	29	29	32	32	28	23	24	30	34	18	14	15	24	34	34	26	26	31	33	30	33	34	33	27	21	31	29	26	32	33	26	28.1
Canoe Brook§§	Maximum	47	40	46	46	44	44	50	48	45	39	35	43	50	42	45	46	58	51	47	36	42	42	41	45	45	45	50	45	48	55	48	45.4
	Minimum	28	28	32	28	27	21	27	34	35	20	15	20	33	35	34	23	27	28	33	31	34	33	30	27	17	31	26	24	32	29	22	27.8
Elizabeth	Maximum	47	42	46	46	43	46	43	50	49	43	32	45	57	44	46	44	60	59	43	42	....	45	42	47	45	40	59	47	49	56	55	47.1a
	Minimum	31	29	34	33	30	33	30	40	36	21	16	21	34	37	37	25	32	37	32	33	....	34	32	28	21	33	31	30	33	32	30	30.8a
Flemington	Maximum	50	41	47	49	45	51	41	55	49	44	38	48	45	45	47	47	63	54	42	37	45	45	40	48	49	44	52	48	54	60	47	47.4
	Minimum	31	29	34	30	30	22	30	38	35	22	15	22	31	36	36	25	30	33	32	32	35	34	31	28	26	32	33	28	30	30	30	30.0
Jersey City	Maximum	46	39	44	45	42	44	50	52	47	36	33	44	51	45	45	42	59	50	42	39	46	44	41	46	46	40	50	46	49	55	48	45.4
	Minimum	32	28	34	32	28	23	33	41	36	20	15	24	34	36	34	25	32	38	32	34	35	34	34	28	29	32	33	33	32	34	40	31.5
Lambertville	Maximum	47	40	47	46	42	45	48	54	46	37	31	44	46	46	44	46	59	54	40	37	41	43	38	44	46	40	45	44	48	48	55	44.9
	Minimum	30	27	31	30	27	22	30	37	34	20	13	21	32	36	31	23	32	38	32	32	34	34	31	21	28	31	33	31	30	29	36	29.5
Little Falls§§	Maximum	46	40	45	45	42	46	51	42	53	37	40	45	52	43	45	44	60	49	45	43	36	43	40	47	47	44	51	44	48	57	48	45.7
	Minimum	32	27	31	31	28	22	28	34	21	20	14	20	36	35	35	24	30	33	33	31	34	34	33	27	23	32	31	28	32	33	27	29.0
New Brunswick	Maximum	49	44	48	48	42	46	42	59	48	44	31	44	49	43	45	41	59	58	39	43	43	44	40	44	46	44	46	45	48	55	53	46.1
	Minimum	31	28	33	31	29	22	30	41	34	21	15	22	32	36	36	24	32	35	32	32	34	34	32	28	25	32	32	30	31	31	29	30.1
Paterson	Maximum	47	40	40	45	43	45	45	51	46	36	32	44	51	41	45	43	59	55	46	37	43	45	41	45	47	42	49	45	49	56	52	45.3
	Minimum	34	30	30	32	29	23	32	39	36	22	15	25	36	37	35	25	34	37	31	31	34	35	34	27	28	33	33	32	33	34	30	31.2
Plainfield	Maximum	48	41	48	48	44	44	47	52	48	36	33	45	49	44	46	44	61	50	45	37	44	45	41	47	48	40	50	46	50	56	44	45.8
	Minimum	29	28	32	31	28	22	28	40	36	20	14	20	32	35	35	23	27	35	31	31	32	33	33	27	24	33	31	27	30	30	28	29.2
Ridgefield	Maximum	47	48	43	45	42	44	54	54	47	35	32	44	50	40	45	43	61	46	37	36	44	44	39	48	45	38	52	43	50	57	48	45.2
	Minimum	31	29	33	31	27	22	41	41	35	22	15	23	35	36	29	24	33	36	32	32	34	34	32	27	26	33	30	31	32	32	31	30.6
Somerville	Maximum	50	42	49	50	44	47	43	56	48	40	34	46	48	45	47	43	61	50	42	37	43	45	39	46	50	40	49	48	51	58	47	46.4
	Minimum	29	28	31	30	28	22	30	39	35	22	14	20	30	37	37	22	31	30	33	33	35	34	32	27	21	32	30	25	31	28	27	29.1
New York, N. Y	Maximum	46	38	42	42	40	44	51	52	46	36	32	43	52	45	44	40	57	50	39	40	47	42	40	44	45	40	50	45	47	53	.48	44.5
	Minimum	33	28	34	32	25	23	35	41	35	18	15	25	35	36	30	25	34	39	33	34	35	34	34	28	29	32	33	34	32	35	40	31.5
The Southern Interior.																																	
Belleplain	Maximum	50	42	....	50	46	48	58	56	53	45	50	45	68	70	61	46	61	59	43	45	....	51	40	43	46	46	48	57	51	....	57	51.2c
	Minimum	30	28	....	31	27	32	17	41	35	28	16	19	31	43	40	24	27	31	37	37	....	35	30	29	19	32	33	27	28	....	20	29.5c
Bridgeton	Maximum	45	45	48	47	45	48	54	55	52	34	31	47	63	64	59	50	63	61	43	44	47	47	42	43	45	45	54	52	50	57	51	49.4
	Minimum	32	30	32	32	30	23	32	40	34	24	17	23	30	40	38	27	30	39	36	36	36	35	29	29	24	31	30	29	30	29	35	31.0
Burlington	Maximum	47	45	46	47	48	47	45	57	49	48	33	47	53	51	51	44	60	59	47	46	44	44	42	43	48	46	47	50	49	57	56	48.3
	Minimum	33	30	35	34	35	25	30	43	38	21	22	26	22	37	39	27	32	35	35	35	36	37	33	30	27	33	32	32	32	34	32	32.0
Camden	Maximum	48	42	49	47	45	47	57	55	52	39	33	48	52	52	49	43	62	55	39	41	47	47	40	43	49	45	49	52	51	59	52	48.0
	Minimum	32	31	35	34	31	27	31	44	39	20	18	24	34	38	34	29	34	37	35	35	37	37	36	31	28	32	36	33	33	35	36	32.8
Freehold	Maximum	45	39	44	46	41	44	48	54	48	41	31	44	52	43	46	42	59	53	39	38	43	43	40	45	45	38	47	48	48	54	49	45.1
	Minimum	31	27	32	31	29	23	31	42	36	22	16	21	33	37	38	25	30	38	34	37	35	35	32	28	24	32	32	31	31	31	35	30.9
Hammonton	Maximum	52	43	48	50	45	48	53	57	53	51	34	47	65	57	59	45	62	51	49	42	46	47	38	44	48	45	48	57	52	57	52	49.8
	Minimum	30	30	32	33	30	21	28	41	32	21	17	22	29	40	39	26	30	36	36	36	39	35	31	28	24	32	33	31	30	29	31	30.7
Hightstown	Maximum	46	41	46	47	43	45	43	56	48	44	32	44	48	45	44	42	59	54	44	44	42	44	42	45	48	42	47	47	49	55	52	46.1
	Minimum	30	27	32	31	28	32	30	42	37	21	15	22	33	37	37	24	38	37	33	34	35	35	31	28	24	32	32	31	30	31	29	30.9
Indian Mills	Maximum	49	44	47	46	44	48	52	57	52	48	32	47	61	53	52	46	63	58	42	42	45	48	48	42	48	42	46	55	50	56	53	48.7
	Minimum	30	29	33	32	30	24	28	41	38	24	16	19	29	40	40	26	28	35	36	36	38	36	30	28	22	30	33	28	30	26	29	30.5
Lakewood	Maximum	47	40	47	46	44	44	48	53	49	45	31	45	58	46	49	41	61	57	40	40	44	45	42	46	44	40	48	49	50	56	53	46.7
	Minimum	32	30	33	34	29	22	30	46	39	24	16	21	35	40	40	26	29	36	36	36	38	37	33	29	26	32	32	28	32	31	27	31.6
Moorestown	Maximum	48	42	47	47	44	47	57	54	50	40	33	45	52	52	48	43	61	55	39	40	45	45	38	43	45	43	47	50	49	57	51	47.0
	Minimum	32	30	34	33	28	25	30	44	38	19	17	24	32	39	32	28	34	39	36	35	37	39	34	30	26	32	35	32	32	33	36	32.0
Pemberton	Maximum	48	43	47	48	44	45	54	56	51	45	31	44	55	51	48	44	61	59	42	41	44	45	42	46	47	42	47	51	50	58	57	47.9
	Minimum	29	29	34	32	30	24	32	43	39	24	17	22	32	39	40	28	30	37	36	36	38	36	33	30	26	33	33	30	32	30	32	31.8
Pleasantville§§	Maximum	50	39	48	49	46	46	54	56	53	42	34	48	59	54	64	52	56	53	47	45	52	47	42	45	45	46	49	57	52	57	50	49.6
	Minimum	29	30	32	36	29	18	18	40	38	27	14	18	32	38	40	23	28	35	39	38	40	35	31	29	22	33	34	30	29	27	28	30.3
Runyon	Maximum	48	49	50	50	48	52	54	54	49	46	29	48	48	46	48	48	60	44	40	40	42	44	38	48	48	42	50	44	54	59	62	47.8
	Minimum	28	29	29	27	26	26	30	37	34	20	13	20	34	36	38	25	25	30	33	33	36	32	36	23	15	32	24	20	25	28	25	28.0
Trenton	Maximum	46	40	45	45	41	46	57	56	48	38	30	44	49	46	46	42	59	51	40	39	45	44	38	43	45	39	47	48	48	55	47	45.4
	Minimum	32	29	34	33	28	25	33	42	38	20	17	24	34	37	33	26	33	39	33	33	35	36	32	29	28	32	35	33	32	33	37	31.8
Tuckerton	Maximum	50	42	44	50	50	40	50	55	52	46	46	50	53	53	60	52	50	50	42	46	52	45	42	45	44	46	50	52	46	58	48	48.8
	Minimum	37	32	38	36	34	28	34	41	41	23	24	28	39	40	40	29	38	36	37	35	37	36	35	32	38	33	39	37	34	37	40	35.1
Philadelphia, Pa	Maximum	49	43	48	47	45	46	57	55	52	42	33	47	53	53	48	44	60	55	41	42	48	45	40	44	46	44	48	52	50	58	52	48.0
	Minimum	37	32	37	36	33	28	39	45	41	21	20	28	36	40	34	29	36	41	37	35	37	38	35	32	32	34	38	37	34	37	44	34.8
The Sea Coast.																																	
Asbury Park	Maximum	45	38	44	45	43	43	46	51	50	43	31	45	54	44	48	43	61	50	41	40	44	44	40	45	41	38	49	50	55	56	53	45.8
	Minimum	35	29	31	34	30	24	34	40	36	24	17	25	37	39	37	27	34	40	36	37	38	37	33	31	30	34	34	34	32	33	36	32.9
Atlantic City	Maximum	50	40	49	49	46	41	49	54	52	42	32	46	52	52	61	45	50	51	41	43	51	46	40	45	45	46	49	53	51	58	49	47.7
	Minimum	33	31	34	34	31	26	39	43	38	22	18	28	40	40	35	30	38	41	39	40	40	37	84	30	29	36	36	34	21	33	41	34.2
Long Branch	Maximum	44	38	44	45	43	44	50	45	49	36	32	45	56	41	46	42	63	48	39	39	43	44	38	44	42	37	51	49	50	56	47	44.8
	Minimum	33	29	34	33	29	23	32	41	37	20	16	23	36	39	33	26	33	39	36	37	37	36	33	30	29	33	33	33	32	31	32	31.9
Sandy Hook	Maximum	45	39	44	44	41	42	49	48	46	37	31	42	48	41	44	41	56	46	39	38	44	42	39	44	40	38	49	43	47	51	44	43.3
	Minimum	34	29	36	35	28	26	34	41	37	21	18	27	37	38	33	27	34	39	34	35	37	37	34	31	33	35	36	35	34	36	38	33.2

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a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

Vol. XXXVIII. April, 1933. No. 4.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month was nearly normal in temperature but was considerably wetter than usual. The variations in temperature from day to day were not large and a little more than half of the days had averages above the normal. Highest temperatures for the month were recorded on the 29th, with very few exceptions, and were mostly near the eighty-degree mark, except along the Shore where they were in the low seventies. The lowest points reached were at or below the freezing point at nearly all stations, and were registered on the 23d.

Rain occurred frequently, especially during the first two decades when it was recorded on a majority of the days. During the third decade, fair weather was quite general with the exception of the 25-26th. The heaviest general rain fell on the 12th when amounts ranging from one to over two inches were measured at nearly all stations. The monthly average was 134% of the normal for the State, ranging from 112% along the Sea Coast to 139% in the Highlands. A few light snows occurred, varying in amount from a few flakes to two inches, and over, in the higher altitudes. Killing frosts occurred as late as the 28th doing considerable damage, especially to peaches.

Seeding operations were much delayed by the wet weather; they were variously estimated to be from ten days to two weeks later than usual at the close of the month.

There was no particular damage by wind reported, this being quite favorable as April is usually a windy month.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 50.4°, which was 0.7° above normal. The highest temperature was 85° at Belvidere and Burlington on the 29th and 30th respectively, and the lowest, 20°, at Newton on the 23d, and at Layton on the 23d and 28th. The greatest daily range of temperature was 47° at Freehold on the 29th. The highest monthly mean temperature was 53.2° at Hammonton, and the lowest, 47.0° at Phillipsburg.

The temperature departure from the normal for the year, 1933, to date, by sections, is: The Highlands, +3.4°; Red Sandstone Plain, +0.9°; Southern Interior, +3.3°; Sea Coast, +3.5°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 46 stations, was 4.84 inches, which was 1.23 inches above normal. The average total snowfall at 20 selected stations was 0.2 inch. The greatest monthly precipitation was 7.09 inches, at Little Falls, and the least, 3.52 inches at Tuckerton. The greatest amount of precipitation in any 24 consecutive hours was 2.55 inches at Port Norris on the 12th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 11, or 1 more than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands, +1.00 inch; Red Sandstone Plain, −0.11 inch; Southern Interior, +1.14 inches; Sea Coast, +0.38 inch.

WIND.

The prevailing wind direction was from the West. The wind movement averaged 14 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 49 miles per hour from the Northeast at Atlantic City on the 20th.

MISCELLANEOUS.

The per cent of possible sunshine was 56, or 1 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 29.99 inches, or 0.01 inch below normal. The highest reading was 30.43 inches at Sandy Hook on the 20th, and the lowest 29.37 inches at Long Branch and Sandy Hook on the 26th.

The mean stage of the Delaware River at Phillipsburg was 7.1 feet, and the highest 11.6 feet on the 19th. The mean stage at Trenton was 4.3 feet, or 0.4 foot above normal. The highest was 7.3 feet on the 19th.

Thunderstorms occurred generally throughout the State on the 3d, 4th and 7th. Light hail fell at Hammonton and Moorestown on the 6th. Light to heavy frosts were observed on the following dates: 9, 13, 21, 22, 23, 24, 27, and 28. Killing frost occurred generally in the north on the 21, 23, and 28 and at scattered points on the following dates; 11, 13, 14, 21, 22, 23, 24, and 27. Sleet fell at Belvidere and Dover on the 12th. Dense fog occurred in northern sections on the 1st, 17th and 26th and in the south on the following dates: 3, 4, 6, 7, 14, 16, 17, 18, 19 and 25, being most general on the 18th. Light fog was fairly general in the north on the 16th.

COMPARATIVE DATA FOR APRIL

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	48.4	−1.3	88	26	2.79	−0.82	2.86	0.89	......	....	....	....	....
1886	50.6	+0.9	86	27	3.40	−0.21	5.48	1.86	......	....	....	....	....
1887	47.3	−2.4	87	16	2.70	−0.91	3.77	0.91	......	7	...	....	....
1888	47.9	−1.8	92	22	3.28	−0.33	4.68	1.89	......	9	....	....	....
1889	51.2	+1.5	83	25	5.32	+1.71	7.25	2.92	......	12	....	....	....
1890	50.4	+0.7	86	21	2.65	−0.96	4.58	1.89	......	8	....	....	....
1891	52.0	+2.3	88	20	2.19	−1.42	3.80	1.39	.	8	13	11	6
1892	49.3	−0.4	87	19	2.49	−1.12	4.11	1.05	......	8	9	13	8
1893	49.2	−0.5	82	19	5.21	+1.60	7.12	2.97	......	11	9	10	12
1894	50.3	+0.6	88	10	3.09	−0.52	4.86	1.71	....	9	12	9	9
1895	49.1	−0.6	89	19	4.88	+1.27	7.75	3.47	T.	10	11	7	12
1896	52.4	+2.7	98	12	1.35	−2.26	2.30	0.64	3.1	7	13	10	7
1897	50.4	+0.7	89	19	3.79	+0.18	6.98	2.17	T.	9	14	11	5
1898	47.8	−1.9	81	13	3.74	+0.13	4.94	2.17	2.9	11	8	11	11
1899	49.9	+0.2	88	18	1.73	−1.88	3.25	0.48	T.	4	16	10	4
1900	50.8	+1.1	82	18	2.29	−1.32	3.03	1.59	T.	6	14	9	7
1901	48.3	−1.4	89	23	6.31	+2.70	10.22	3.46	0	12	8	7	15
1902	50.2	+0.5	93	20	3.62	+0.01	5.99	2.45	0	9	10	11	9
1903	50.9	+1.2	92	18	3.97	+0.36	7.03	2.40	0	9	13	7	10
1904	46.7	−3.0	85	16	3.42	−0.19	4.71	2.00	0.1	10	9	12	9
1905	49.9	+0.2	84	18	2.88	−0.73	4.03	1.53	0.1	10	12	11	7
1906	51.2	+1.5	87	17	3.64	+0.03	6.42	1.17	T.	8	15	10	5
1907	45.2	−4.5	83	19	3.78	+0.17	8.67	2.06	4.8	11	11	9	10
1908	51.2	+1.5	93	13	2.72	−0.89	3.86	1.42	T.	11	14	9	7
1909	50.2	+0.5	88	17	5.97	+2.36	8.90	3.84	0.8	13	10	11	9
1910	53.5	+3.8	88	20	5.34	+1.73	7.56	3.43	0	12	9	11	10
1911	47.4	−2.3	88	14	4.11	+0.50	5.58	2.87	2.6	11	10	10	10
1912	50.4	+0.7	82	18	3.56	−0.05	6.02	1.81	0	14	9	10	11
1913	52.1	+2.4	89	19	5.78	+2.17	8.53	4.14	T.	11	14	7	9
1914	48.4	−1.3	89	16	3.67	+0.06	4.78	2.35	0	11	13	10	7
1915	54.1	+4.7	96	20	2.71	−0.90	4.13	1.28	11.5	9	14	10	6
1916	48.2	−1.5	85	21	3.32	−0.29	6.14	0.90	4.4	13	10	9	11
1917	48.8	−0.9	88	21	2.39	−1.22	3.54	1.19	4.7	9	15	8	7
1918	49.8	+0.1	81	22	4.05	+0.44	5.79	2.88	2.6	12	11	8	11
1919	49.3	−0.4	85	15	3.06	−0.55	4.79	2.20	T.	10	13	7	10
1920	48.0	−1.7	85	13	4.50	+0.89	6.06	2.90	T.	13	12	9	9
1921	56.3	+6.6	87	20	3.57	−0.04	5.20	1.86	0.4	11	13	6	11
1922	51.0	+1.3	89	18	2.55	−1.06	4.12	1.57	T.	10	15	7	8
1923	50.0	+0.3	91	3	3.55	−0.06	6.59	2.27	0.5	9	16	6	8
1924	48.0	−1.7	81	18	6.15	+2.54	9.23	4.74	6.6	11	15	6	9
1925	51.4	+1.7	88	15	2.40	−1.21	3.35	1.31	0	9	15	7	8
1926	46.4	−3.3	87	14	2.05	−1.56	2.97	1.39	T.	8	13	10	7
1927	47.5	−2.3	93	17	2.42	−1.19	3.97	1.00	0.3	9	14	7	9
1928	47.4	−2.3	85	16	5.26	+1.65	7.16	3.82	0.9	12	12	8	10
1929	51.1	+1.4	94	25	6.43	+2.82	8.74	4.63	T.	15	10	5	15
1930	47.6	−2.1	79	18	2.34	−1.27	3.72	0.50	T.	9	13	7	10
1931	49.8	+0.1	80	20	2.85	−0.76	5.17	1.53	T.	9	15	6	9
1932	48.3	−1.4	82	18	2.71	−0.90	4.69	1.16	0.1	7	15	7	8
1933	50.4	+0.7	85	20	4.84	+1.23	7.09	3.52	0.2	11	12	7	11
Period	49.7	....	98	3	3.61	....	10.22	0.48	1.2	10	12	9	9

W. B. O. Philadelphia-5-26-33-875.

Climatological Data for April, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	51.8	+2.0	85	29	26	23	41	5.02	+1.36	1.70	T.	10	19	4	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	49.4	+2.6	79	29	23	27	42	5.95	+1.63	1.98	1.0	12	23	2	5	e.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	....	......	......	26	23	....	4.78	+0.96	1.48	2.5	10	17	5	8	s	Briec E. Riker.
Dover	Morris	600	49	48.8	+1.4	81	29	25	28	38	5.21	+1.45	1.68	T.	13	4	12	14	......	William C. Harris
Layton	Sussex	480	32	49.0	+1.8	80	29	20	23†	46	5.15	+1.54	1.80	2.0	11	6	6	18	w.	A. M. Depue.
Long Valley	Morris	520	3	49.3	....	79	29	25	23	39	5.27	....	1.54	0	11	11	7	12	se.	S. N .Dilts.
Newton	Sussex	769	50	50.8	+2.8	81	29	20	23	39	4.71	+1.34	1.68	1.0	10	12	5	13	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	47.0	−2.9	84	29	29	23	38	4.94	+1.68	1.86	T.	12	11	4	15	......	Town Engineer.
Sussex	Sussex	442	38	50.0ᵃ	+1.4	78	29†	25	28	39	4.88	+1.44	1.37	0	15	14	4	12	......	A. J. W. Mowatt
Means and extremes	......	......	....	49.5	+1.3	85	29	20	23†	46	5.10	+1.42	1.98	0.7	12	13	5	12	s.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	49.6	+0.9	78	29	25	28	38	5.06	+1.07	1.40	......	13	10	6	14	ne.	John Kline.
Canoe Brook	Essex	173	3	49.0	....	80	29	22	23	44	4.93	....	1.60	......	10	15	4	11	w.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	....	......	......	......	......	....	6.62	+2.52	1.04	......	13	13	10	7	......	Paul Molitor, Sr.
Elizabeth	Union	45	54	52.2	+1.4	81	29	30	23†	37	4.39	+0.71	1.64	T.	10	14	5	11	se.	Union County Park Comm.
Flemington	Hunterdon	140	§47	52.0	+1.6	82	29	28	23	40	4.49	+0.97	1.68	0	10	17	5	8	e.	Hiram E. Deats.
Jersey City	Hudson	10	35	50.8	+0.8	79	29	32	13†	33	4.69	+0.53	2.00	0.3	10	6	12	12	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	46	50.2	−0.5	78	29	25	23	34	4.60	+1.02	1.41	0	9	11	5	14	s.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	50.6	+0.7	83	29	28	23†	38	7.09	+2.97	1.92	0	14	12	5	13	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	49.8	+0.2	80	29	28	23	34	4.30	+0.56	1.41	0	12	13	10	7	ne.	N. J. Experiment Station.
New Milford‡‡	Bergen	......	15	......	....	......	......	......	......	....	5.58	....	1.68	0	14	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	51.4	+0.9	83	29	31	23†	34	5.89	+2.33	1.70	0	12	10	9	11	se.	William H. Meyer.
Plainfield	Union	120	45	49 8	+0.2	80	29	25	23	38	4.64	+0.74	1.47	T.	9	8	10	12	nw.	S. K .Pearson.
Ridgefield	Bergen	80	16	49.8	....	81	29	29	23	33	5.49	....	1.94	0.4	12	9	9	12	nw.	George P. Kirsten.
Somerville, (near)	Somerset	70	50	50.0	+0.5	81	29	24	23	41	4.44	+0.95	1.64	0	10	9	5	16	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	15	......	....	......	......	......	......	....	5.86	....	1.49	......	14	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	63	50.1	+0.7	76	29	32	12	28	4.49	+1.26	1.95	T.	11	6	9	15	se.	U. S. Weather Bureau.
Means and extremes	......	......	....	50.4	+0.7	83	29	22	23	44	5.20	+1.31	2.00	0.1	11	11	7	12	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	51.1ᶜ	+0.5	76	29	26	22	38	4.70	+1.05	2.20	0	7	10	10	10	se.	A. F. Waldron.
Bridgeton	Cumberland	30	50	51.9	−0.8	77	29	30	23	35	4.18	+0.66	2.15	0	8	20	2	8	sw.	Bennett K. Matlack
Burlington	Burlington	12	§47	53.0	+1.2	85	30	31	23	41	5.40	+1.70	2.02	0	10	13	10	7	w.	Public Service Power Co.
Camden	Camden	20	1	52.5	....	83	29	32	23	33	5.02	....	1.68	0	11	9	13	8	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	50.0	....	82	29	27	23	47	4.51	+0.87	1.78	T.	10	16	6	8	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	53.2ᵇ	....	79	29	30	23	33	4.26	+0.34	1.99	0	9	17	7	6	sw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	51 0	+0.5	81	29	27	23	36	4.10	+0.19	1.50	0	9	12	9	9	e.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	51.9	+1.6	82	29	27	23†	37	4.59	+1.16	2.04	0	10	11	10	9	w.	James M. Armstrong.
Lakewood	Ocean	54	29	49.8	+0.4	79	29	29	23	33	4.57	+0.90	2.08	0	10	10	7	13	ne.	R. W. Holman.
Moorestown	Burlington	......	70	51.4	+1.0	79	29	30	23	32	4.71	+1.42	1.75	0	12	11	12	7	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	....	......	......	......	......	....	3.97	+0.51	1.22	0	10	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	52.4	....	81	29	28	23	33	4.72	....	1.69	0	10	13	5	12	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	50.2	....	71	18	28	22	34	4.37	+1.02	1.27	......	12	16	3	11	se.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	....	....	......	......	......	....	5.19	....	2.55	0	7	14	10	6	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	48.0	....	80	30	21	23	46	4.19	....	1.66	......	11	11	12	7	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	51.0	+1.2	80	29	31	23	32	4.40	+1.46	1.56	T.	12	8	9	13	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	....	......	......	......	......	....	5.59	....	1.89	0	12	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	50.2	+0.9	72	29	32	27	30	3.52	−0.22	1.44	0	11	13	8	9	ne.	John H. Brown.
Philadelphia, Pa	......	114	62	53.8	+1.7	79	29	34	23	27	5.26	+2.21	1.83	0	11	9	10	11	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	51.2	+0.7	85	30	21	23	47	4.56	+0.85	2.55	T.	10	13	8	9	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	48.6	+0.1	72	20	35	23†	31	4.22	+0.53	1.71	0	10	19	6	5	ne.	Information Bureau.
Atlantic City	Atlantic	16	60	49.3	+1.5	67	2	33	23	24	3.79	+0.80	1.14	0	12	9	9	12	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	48.8	+0.7	75	29	32	27	34	4.19	−0.36	1.56	0	15	10	6	14	nw.	William D. Martin.
Sandy Hook	Monmouth	22	35	48.2	+1.2	73	29	35	23	24	4.46	+0.84	1.59	T.	12	7	10	13	e.	U. S. Weather Bureau.
Means and extremes	......	......	....	48.7	+0.9	75	29	32	27	34	4.16	+0.45	1.71	T	12	11	8	11	ne.	
For the State	......	......	....	50.4	+0.7	85	29†	20	23†	47	4.84	+1.23	2.55	0.2	11	12	7	11	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for April, 1933

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	1.08	....	.17	.35	....	.10	.35	....	....	....	....	1.70	....	....	....	.03	1.10	.08	....	....	....	....	....	....	T	.06	....	....	....	....	....	6.02
Charlotteburg	Passaic	.26	.10	....	1.20	....	.01	.75	....	....	....	....	1.45	.04	....	....	.04	1.60	.38	.03	....	....	....	....	....	.09	....	....	....	....	....	....	5.95
Culvers Lake	Delaware	.96	.43	.10	.25	....	.05	.60	T.	....	.05	....	1.48	....	....	....	T.	.81	.05	....	....	....	....	....	....	....	T.	T.	....	....	....	....	4.78
Dover	Passaic	.65	....	.17	.51	....	*	.62	T.	*	.05	....	1.68	....	....	....	*	1.32	.14	.02	....	....	....	....	....	.05	T.	....	....	....	....	....	5.21
Layton	Delaware	1.34	....	.10	.24	....	.41	.22	....	....	.08	....	1.80	....	....	....	.03	.80	.07	....	....	....	....	....	....	....	.06	....	....	....	....	....	5.15
Long Valley	Morris	.65	.06	.23	.48	....	.25	.45	....	.04	....	....	1.54	....	....	....	.06	1.34	.17	....	....	....	....	....	....	....	T.	....	....	....	....	....	5.27
Newton	Delaware	1.32	....	.18	.32	....	.16	.33	T.	....	.11	....	1.68	....	....	....	T.	.47	....	....	....	....	....	....	....	.04	.10	....	....	....	....	....	4.71
Phillipsburg	...do	.79	.09	.05	.43	....	.08	.51	T.	T.	.05	T.	1.86	....	....	....	.18	.83	.05	T.	....	....	....	....	....	T.	.02	....	....	....	....	....	4.94
Sussex	Hudson	.71	1.21	.06	.36	.02	.38	*	.04	....	.05	....	1.37	.08	....	....	.01	.47	.08	....	....	....	....	....	....	....	.04	....	....	....	....	....	4.88
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic	.22	.30	.15	.22	.20	....	1.05	T.	....	.08	....	.30	1.10	....	....	.05	.73	.63	T.	T.	....	....	....	....	....	.03	....	....	....	....	....	5.06
Canoe Brook ‖‖	Essex	.21	.15	.13	.61	.09	T.	.80	T.	T.	....	....	.48	1.12	....	....	....	.75	.59	....	....	....	....	....	....	....	....	....	....	....	....	....	4.93
Chatham ‖	...do	.74	.37	.09	.56	.72	..	.89	.23	....	.17	....	.42	1.04	....	....	.16	.49	.74	....	....	....	....	....	....	....	T.	....	....	....	....	....	6.62
Elizabeth	Coast	.18	T.	.12	.75	....	.10	.60	....	....	T.	....	1.64	.12	T.	....	.16	.61	.11	T.	....	....	....	....	....	T	....	....	....	....	....	....	4.39
Flemington	Raritan	.48	....	.12	.55	....	.19	.48	....	....	.06	....	1.68	....	....	....	.03	.82	.08	....	....	....	....	....	....	T	....	....	....	....	....	....	4.49
Jersey City	Coast	.18	....	.08	.80	....	.32	.19	....	T.	.05	T.	2.00	....	T.	....	.15	.50	.42	T.	....	....	....	....	....	T.	T.	....	....	....	....	....	4.69
Lambertville	Delaware	.53	....	.12	.79	....	.27	.35	....	....	.03	....	1.41	....	....	T	....	1.01	.09	....	....	....	....	....	....	....	T.	....	....	....	....	....	4.60
Little Falls ‖‖	Passaic	.22	.19	.14	.53	.17	....	1.26	.01	....	.07	....	.45	1.47	....	....	.12	.59	1.81	....	T.	....	....	....	....	....	.06	....	....	....	....	....	7.09
New Brunswick	Raritan	.12	T.	.10	.72	..	.24	.60	....	....	.08	....	1.41	.01	....	....	.19	.70	.10	T.	....	....	....	....	....	.03	T.	....	....	....	....	....	4.30
New Milford ‖‖	Hackensack	.26	.06	.04	.52	.11	....	1.02	.05	....	.03	....	.35	1.68	....	....	.15	.18	1.10	....	....	....	....	....	....	....	.03	....	....	....	....	....	5.58
Paterson	Passaic	.03	T.	.13	.65	....	.24	.77	....	....	.05	....	1.67	.03	....	....	.12	1.50	.60	T.	....	....	....	....	....	.10	T.	....	....	....	....	....	5.89
Plainfield	Raritan	.25	....	.09	.78	....	....	.71	..	....	.07	T.	1.47	....	....	....	.11	.85	.31	....	....	....	....	....	....	T.	T.	....	....	....	....	....	4.64
Ridgefield**	Hackensack	.09	....	.11	.80	....	.60	.55	....	....	.04	T.	1.94	....	....	....	.13	.64	.55	T.	....	....	....	....	....	.03	.01	....	....	....	....	....	5.49
Somerville	Raritan	.26	....	.14	.72	....	.46	.37	....	....	.08	....	1.64	....	....	....	.08	.67	.02	....	....	....	....	....	....	....	....	....	....	....	....	....	4.44
Woodcliff Lake ‖‖	Hackensack	.22	.12	.13	.49	.22	....	.86	.11	....	.03	....	.29	1.49	....	....	.11	.22	1.36	....	....	....	....	....	....	....	.21	....	....	....	....	....	5.86
New York, N. Y***	Coast	.04	.01	.25	.64	....	.34	.15	....	T.	.05	T.	1.95	....	T.	T.	.17	.78	.11	T.	....	....	....	....	....	T.	T.	....	....	....	....	....	4.49
The Southern Interior.																																	
Belleplain	Tuckahoe	.21	.12	.75	....	....	.60	T.	....	....	....	....	2.20	....	....	....	.22	.60	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	4.70
Bridgeton	Delaware	.18	....	....	.42	....	.31	.17	....	....	....	....	2.15	....	....	....	.06	.85	..	T.	.04	....	....	....	....	....	....	....	....	....	....	....	4.18
Burlington	Delaware	.09	....	.24	.99	....	.39	.50	T	....	.05	T.	2.02	....	....	....	T.	1.01	.02	....	....	....	....	....	....	.09	T.	....	....	....	....	....	5.40
Camden***	..do	.05	.37	.72	.18	....	.68	.43	....	.03	.01	T.	1.68	....	....	....	.21	.66	T.	T.	....	....	....	....	....	T.	T.	....	....	....	....	....	5.02
Freehold	Raritan	18	....	....	.88	....	.24	.42	....	....	.02	....	1.78	....	....	....	.14	.70	.13	.02	T.	....	....	....	....	T.	....	....	....	....	....	....	4.51
Hammonton	Mullica	.16	....	.12	.08	....	.81	.27	....	....	T.	....	1.99	....	....	....	....	.73	.05	.05	....	....	....	....	....	....	....	....	....	....	....	....	4.26
Hightstown	Raritan	.24	....	.27	.80	....	.11	.34	....	....	....	....	1.50	....	....	....	....	.63	.03	....	....	....	....	....	....	.18	....	....	....	....	....	....	4.10
Indian Mills	Mullica	.11	....	....	.70	....	.29	.33	....	....	.09	....	2.04	....	....	....	.09	.70	.22	T.	....	....	....	....	....	....	.02	....	....	....	....	....	4.59
Lakewood	Metedeconk	.20	....	.20	.55	....	.20	.32	....	....	.09	....	2.08	....	....	....	T.	.75	.06	....	....	....	....	....	....	.12	....	....	....	....	....	....	4.57
Moorestown ‖‖	Delaware	.11	.06	.23	.73	T.	....	.82	T.	....	.05	....	.70	1.05	....	....	.07	.77	.10	....	....	....	....	....	....	....	.02	....	....	....	....	....	4.71
Northfield	Coast	.26	.06	.01	.92	....	.67	.31	....	..	T.	.01	1.22	....	....	T.	.06	.45	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3.97
Pemberton	Delaware	.23	.01	.28	.71	....	.08	1.00	....	....	.06	....	1.69	....	....	.01	....	.65	....	....	....	....	....	....	....	....	T.	....	....	....	....	....	4.72
Pleasantville ‖‖	Coast	.10	.25	.43	.55	.08	....	1.04	....	....	.01	....	.22	1.05	....	T.	.05	.44	.15	....	T.	....	....	....	....	....	....	....	....	....	....	....	4.37
Port Norris	Maurice	.24	.17	....	.82	....	.43	....	..	....	....	....	2.55	....	....	....	....	.80	....	....	.18	....	....	....	....	....	....	....	....	....	....	....	5.19
Runyon	Coast	.12	....	.12	.70	....	.32	.20	..	....	.07	....	1.66	....	....	....	.28	.59	.05	....	....	....	....	....	....	.08	....	....	....	....	....	....	4.19
Trenton***	Delaware	.03	.09	.64	.21	....	.47	.42	....	.04	.07	....	1.56	....	....	....	.19	.53	....	T.	T.	....	....	....	....	.15	T.	....	....	....	....	....	4.40
Trenton No. 2 ‖‖	....do	.15	T.	.12	.73	.22	....	1.07	T.	....	.12	....	.66	1.23	....	....	.16	.58	.37	....	T.	....	....	....	....	T.	.18	T.	....	....	....	....	5.59
Tuckerton	Coast	.03	....	.12	.08	....	.01	.74	....	....	....	....	.32	1.12	....	.06	.08	.93	....	....	....	....	....	....	....	.03	....	....	....	....	....	....	3.52
Phila., Pa***	Delaware	.05	.23	.72	.20	....	.98	.10	....	.04	.02	T.	1.83	....	....	....	.29	.80	....	T.	....	....	....	....	....	T.	T.	....	....	....	....	....	5.26
The Sea Coast.																																	
Asbury Park	Coast	.10	T.	.17	.41	..	.20	.43	....	T.	.04	....	1.71	....	....	.02	T.	.52	T.	....	....	....	....	....	....	.62	....	....	....	....	....	....	4.22
Atlantic City***	....do	.48	.01	.58	.33	....	.53	.21	....	T.	.03	.02	1.12	....	T.	.01	.04	.43	T.	T.	T.	....	....	....	....	T.	T.	....	....	....	....	....	3.79
Long Branch**	....do	.09	.07	.45	.36	....	.19	.13	....	.09	.06	.02	1.54	....	..	.01	.04	.83	.01	T.	....	....	....	....	....	.30	T.	....	....	....	....	....	4.19
Sandy Hook***	....do	.06	.01	.47	.40	....	.29	.32	....	....	.17	T.	1.59	...	T.	T.	.07	.65	.02	T.	....	....	....	....	....	.41	T.	....	....	....	....	....	4.46

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.00	30.36	13	29.44	26	18.6	49	ne.	20	80	69	81	58
Camden	30.00	30.40	13	29.41	26	11.6	37	e.	20	72	53	62	......
Long Branch	30.00	30.40	20	29.37	26	......	......	......	......	75	66	63	52
New York, N. Y	29.98	30.42	20	29.38	26	13.7	46	nw.	4	72	60	66	54
Philadelphia, Pa	30.00	30.39	14	29.40	26	14.3	36	e.	19	70	52	56	54
Ridgefield	29.98	30.43	20	29.38	26	......	......	......	......	......	......	......	......
Sandy Hook	29.98	30.43	20	29.37	26	14.6	35	n.	12	79	75	79	56
Trenton	29.99	30.39	20	29.38	26	10.5	32	w.	26	76	57	66	60

Daily Temperatures for April, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	69	64	65	60	65	59	55	49	67	63	54	44	60	66	67	64	63	74	69	57	67	56	61	73	68	65	53	69	85	79	....	63.7
	Minimum	40	47	43	41	37	37	47	37	35	42	40	33	34	35	46	47	47	56	40	41	30	42	26	33	42	42	28	28	50	49	....	39.8
Charlotteburg	Maximum	63	64	61	53	59	60	53	45	56	62	57	47	54	56	64	67	65	68	67	76	60	60	59	70	69	63	48	58	79	83	....	61.5
	Minimum	36	48	43	37	36	30	42	35	35	39	31	31	31	31	42	41	50	52	41	38	26	35	26	28	39	39	23	43	49	42	....	37.3
Dover	Maximum	65	59	64	52	63	55	55	48	61	59	49	41	58	56	64	59	56	67	56	54	61	55	58	72	65	55	51	62	81	79	....	59.3
	Minimum	39	47	41	40	36	35	40	35	35	40	36	34	31	33	44	45	51	53	42	38	28	33	27	34	43	36	29	25	50	46	....	38.2
Layton	Maximum	62	68	62	51	62	57	54	47	59	65	54	43	59	61	65	64	60	73	60	59	66	53	58	71	65	58	50	65	80	78	....	61.0
	Minimum	35	48	40	40	36	30	41	36	37	40	32	32	31	28	44	46	53	55	45	40	25	37	20	25	36	38	24	20	53	40	....	36.9
Long Valley	Maximum	65	60	62	53	62	56	56	47	62	58	50	48	62	56	62	60	61	71	65	56	63	58	56	70	70	56	51	64	79	75	....	60.5
	Minimum	38	48	44	40	37	34	45	35	34	34	33	34	33	36	43	44	54	54	42	38	26	36	25	31	37	40	29	29	46	43	....	38.1
Newton	Maximum	68	60	68	65	62	68	66	51	61	76	57	57	61	60	61	60	60	70	66	57	66	55	56	78	67	59	51	64	81	77	....	63.6
	Minimum	36	42	45	37	35	36	40	33	35	38	38	32	30	33	40	42	53	52	41	38	29	38	20	39	46	35	27	28	50	51	....	38.0
Phillipsburg	Maximum	54	53	53	47	46	52	52	47	53	53	46	42	49	51	66	60	59	69	59	45	47	47	45	50	56	56	45	58	84	67	....	53.7
	Minimum	41	47	45	41	35	38	40	38	35	44	40	34	33	37	47	48	55	56	43	39	31	35	29	37	42	44	31	30	46	48	....	40.3
Sussex	Maximum	53	56	67	66	52	51	....	48	57	62	62	47	54	59	65	64	61	66	65	48	65	64	57	70	70	63	46	59	78	78	....	60.4ᵃ
	Minimum	38	48	45	40	36	43	....	37	38	41	37	33	31	33	45	47	54	55	45	40	29	40	27	31	43	40	27	25	52	45	....	39.5ᵃ
The Red Sandstone Plain.																																	
Boonton§§	Maximum	68	61	63	58	62	56	56	48	60	60	53	43	56	56	63	62	58	70	55	57	62	62	57	70	72	60	51	63	78	76	....	60.5
	Minimum	35	43	42	40	39	34	46	38	39	40	34	37	29	33	43	46	46	53	47	40	29	37	27	36	40	40	28	25	43	54	....	38.8
Canoe Brook§§	Maximum	68	61	61	53	63	56	56	50	62	58	53	48	56	53	62	61	57	68	57	55	60	56	60	70	64	63	53	67	80	77	....	60.3
	Minimum	39	46	45	40	37	32	45	34	33	42	30	38	32	32	43	43	49	52	47	40	25	33	22	28	38	41	27	23	49	42	....	37.6
Elizabeth	Maximum	69	62	69	62	70	72	64	60	70	62	50	45	57	56	60	61	58	68	63	56	65	58	59	72	78	58	55	61	81	79	....	63.3
	Minimum	41	49	46	41	39	40	46	37	37	46	40	34	33	42	42	44	52	52	43	41	34	37	30	35	43	44	30	32	51	48	....	41.0
Flemington	Maximum	67	65	67	61	68	59	59	56	67	59	53	44	60	57	67	61	64	75	63	53	66	59	63	73	69	66	58	69	82	80	....	63.7
	Minimum	40	49	46	41	37	37	48	38	34	44	38	37	34	35	45	46	53	54	45	41	30	36	28	36	42	43	29	29	47	45	....	40.2
Jersey City	Maximum	66	63	60	50	64	56	57	51	62	58	50	46	55	56	60	61	57	68	56	55	62	56	58	71	66	60	55	60	79	69	....	59.6
	Minimum	45	47	43	41	40	44	42	38	38	44	38	33	32	40	43	46	52	52	42	40	39	37	32	38	49	45	34	40	52	54	....	42.0
Lambertville	Maximum	65	62	63	55	60	59	54	50	61	57	51	42	60	51	61	66	62	73	60	52	60	55	54	68	67	58	53	65	78	76	....	59.9
	Minimum	40	49	40	41	37	41	47	37	35	42	37	36	33	35	45	54	54	55	42	37	31	38	25	39	48	42	32	31	48	48	....	40.6
Little Falls§§	Maximum	68	63	61	49	65	57	59	51	63	61	52	46	57	56	63	62	58	69	56	57	65	57	60	74	66	65	53	64	83	77	....	61.2
	Minimum	40	44	44	40	39	36	46	37	39	42	36	38	33	38	44	44	46	52	47	40	30	40	28	36	47	42	32	28	49	47	....	40.1
New Brunswick	Maximum	68	60	60	51	61	60	55	51	61	60	47	42	56	54	60	57	61	65	56	50	57	56	55	70	68	58	54	64	80	79	....	59.2
	Minimum	40	49	44	41	37	39	45	37	34	43	38	35	32	37	45	44	50	51	43	41	32	35	28	36	46	41	32	35	50	49	....	40.3
Paterson	Maximum	65	62	60	59	65	61	56	51	62	60	51	46	56	55	63	61	59	68	63	56	62	56	60	73	69	57	51	61	83	77	....	60.9
	Minimum	40	51	44	41	40	41	45	38	40	43	38	34	35	39	45	45	53	54	44	41	33	41	31	39	51	43	32	31	52	50	....	41.8
Plainfield	Maximum	69	63	62	50	65	57	58	52	64	58	50	42	57	57	62	62	58	68	56	55	63	58	59	72	67	61	55	65	80	70	....	60.5
	Minimum	41	49	45	41	38	35	41	37	31	43	36	34	31	39	41	43	50	51	42	40	30	36	25	34	42	45	30	28	48	45	....	39.0
Ridgefield	Maximum	63	63	52	49	64	56	57	50	62	58	51	40	56	56	59	62	60	66	54	55	61	56	59	72	60	54	52	59	81	72	....	58.6
	Minimum	42	52	43	40	39	42	39	38	39	43	40	33	34	39	45	44	53	52	41	40	31	35	29	39	49	38	32	33	51	55	....	41.0
Somerville	Maximum	70	64	66	53	64	57	59	53	63	57	50	43	59	55	64	62	63	70	56	54	61	57	58	71	69	58	56	57	81	80	....	61.0
	Minimum	41	48	43	42	35	37	46	34	32	42	39	38	31	35	45	46	52	54	43	41	28	34	24	30	40	44	28	26	45	45	....	38.9
New York, N. Y.	Maximum	64	64	58	48	63	54	56	49	60	58	47	47	53	55	56	59	56	67	56	55	59	54	56	67	62	57	52	55	76	67	....	57.7
	Minimum	46	48	43	40	40	48	42	38	39	44	39	32	35	40	43	46	53	52	42	40	41	37	32	39	52	40	35	41	53	55	....	42.5
The Southern Interior.																																	
Belleplain	Maximum	65	69	55	....	61	61	59	56	65	60	51	54	63	....	59	67	67	....	64	48	....	62	55	69	71	58	....	65	76	74	....	62.2ᶜ
	Minimum	46	45	42	....	35	40	47	40	30	45	42	39	34	....	32	44	53	....	42	39	....	26	28	38	47	47	....	27	52	41	....	40.0ᶜ
Bridgeton	Maximum	69	68	68	55	61	61	58	55	57	66	65	50	64	60	59	67	65	73	64	50	65	60	53	70	73	58	59	64	77	74	....	62.9
	Minimum	45	47	46	42	37	42	47	40	43	36	38	39	34	36	42	47	55	48	40	38	31	34	30	35	49	47	30	34	48	47	....	40.9
Burlington	Maximum	75	72	70	64	62	62	62	54	56	61	55	45	60	59	65	63	67	74	72	53	65	60	62	71	70	68	56	68	84	85	....	64.8
	Minimum	34	44	47	42	40	41	49	42	39	37	40	37	35	38	46	45	47	55	44	41	34	34	31	35	44	44	34	38	53	49	....	41.3
Camden	Maximum	70	67	66	54	64	62	59	54	65	64	54	43	62	54	65	67	65	76	51	53	62	57	57	72	76	57	58	69	83	81	....	62.9
	Minimum	46	51	44	43	40	41	42	41	36	42	40	39	38	39	43	47	55	53	41	38	34	37	32	39	46	42	37	36	53	48	....	42.1
Freehold	Maximum	69	62	61	49	60	60	56	50	61	53	47	42	56	52	59	62	59	68	58	49	56	57	55	70	70	70	68	64	82	79	....	60.1
	Minimum	43	50	42	40	37	41	45	38	34	43	38	34	32	39	43	43	53	54	41	40	33	32	27	32	46	44	30	35	35	49	....	39.8
Hammonton	Maximum	70	69	68	58	62	62	59	....	....	65	54	46	61	61	76	72	69	76	67	62	58	59	60	71	72	66	59	66	79	75	....	65.1ᵇ
	Minimum	47	49	47	42	38	40	49	....	....	34	38	39	34	36	43	43	50	53	41	32	33	32	30	38	50	47	33	36	53	48	....	41.2ᵇ
Hightstown	Maximum	70	63	65	51	61	61	58	51	61	58	50	44	57	56	63	65	62	69	66	56	58	57	55	71	70	57	55	67	81	79	....	61.2
	Minimum	43	50	48	40	37	42	46	38	34	42	36	36	31	37	44	45	59	55	42	41	29	34	27	35	45	44	31	34	51	44	....	40.7
Indian Mills	Maximum	70	68	69	58	62	61	60	53	65	66	60	45	59	60	63	68	64	77	68	50	62	58	57	71	74	53	59	67	82	79	....	63.6
	Minimum	46	49	45	42	38	39	49	38	32	44	38	39	35	34	44	45	54	52	40	39	33	28	27	35	43	44	27	32	51	43	....	40.2
Lakewood	Maximum	70	65	61	52	61	59	60	52	60	53	49	44	56	55	53	63	58	69	59	48	55	59	56	71	70	57	56	62	79	74	....	59.5
	Minimum	44	41	43	42	40	36	47	38	33	43	39	37	34	39	43	44	54	54	40	40	31	31	29	38	47	43	30	31	49	44	....	40.1
Moorestown	Maximum	69	61	65	54	62	62	58	52	63	63	53	42	61	54	64	66	64	74	49	51	61	57	56	70	72	56	57	67	79	77	....	61.4
	Minimum	50	51	43	42	40	41	42	40	36	41	39	38	36	36	45	47	53	51	41	37	33	34	30	38	48	40	35	35	51	48	....	41.4
Pemberton	Maximum	71	63	65	57	62	60	58	52	63	65	53	44	60	60	64	67	63	75	70	51	61	58	55	69	72	63	56	66	81	78	....	62.7
	Minimum	46	57	49	43	41	42	50	41	35	45	39	39	35	37	44	47	56	54	42	41	31	33	28	36	47	45	31	35	51	47	....	42.2
Pleasantville§§	Maximum	59	70	70	56	64	56	60	56	62	55	51	51	60	51	52	63	60	71	59	48	50	60	54	70	60	64	61	61	67	70	....	59.7
	Minimum	45	48	45	41	38	43	47	40	31	45	42	43	35	40	41	43	43	49	42	39	37	28	29	36	48	47	29	32	50	48	....	40.8
Runyon	Maximum	68	70	60	54	64	62	60	54	63	60	50	48	58	57	59	58	61	65	59	54	60	61	58	72	70	58	56	68	76	80	....	61.4
	Minimum	26	34	42	41	31	34	33	34	26	27	36	36	31	32	38	44	51	54	38	38	28	31	21	31	34	34	38	25	32	34	....	34.5
Trenton	Maximum	68	65	64	53	61	61	57	50	62	56	50	41	59	52	63	65	62	75	52	50	59	55	55	71	68	54	54	66	80	77	....	60.2
	Minimum	41	51	41	41	39	43	41	40	39	41	39	36	36	39	45	46	55	50	40	39	34	36	31	39	49	41	34	37	53	52	....	41.7
Tuckerton	Maximum	54	56	67	62	60	55	65	60	52	68	53	51	50	54	58	60	60	64	55	50	46	50	55	51	55	56	58	50	72	70	....	57.2
	Minimum	41	45	50	44	45	50	44	46	44	46	40	44	36	42	40	44	48	46	42	41	36	38	42	40	50	46	32	39	42	54	....	43.3
Philadelphia, Pa.	Maximum	67	66	66	55	63	62	57	54	66	65	58	46	64	57	63	65	65	74	55	56	63	57	56	69	70	57	57	67	79	76	....	62.5
	Minimum	50	52	46	44	44	48	44	43	43	45	43	40	39	42	46	50	57	54	43	41	37	36	34	42	54	43	39	42	54	55	....	45.0
The Sea Coast.																																	
Asbury Park	Maximum	54	63	48	56	61	55	57	50	54	51	49	45	52	52	48	54	52	57	51	72	48	54	58	71	68	56	55	53	59	58	....	55.4
	Minimum	43	46	41	41	40	43	45	40	38	44	42	37	36	42	42	44	49	46	42	42	39	36	35	40	47	46	35	43	47	46	....	41.9
Atlantic City	Maximum	57	67	62	54	63	52	59	56	57	51	46	50	53	49	47	54	54	64	54	45	47	60	53	57	57	59	59	55	59	63	....	55.4
	Minimum	45	47	43	42	40	46	42	42	42	46	43	38	36	41	42	47	50	49	42	40	39	36	33	44	49	46	39	43	50	53	....	43.2
Long Branch	Maximum	63	64	49	48	62	51	58	52	61	50	46	44	55	52	54	56	54	58	49	47	52	55	56	73	62	56	56	57	75	70	....	56.2
	Minimum	46	47	40	40	38	42	42	38	35	43	41	38	36	43	42	44	50	48	43	40	38	33	34	39	47	40	32	40	51	50	....	41.3
Sandy Hook	Maximum	62	60	47	49	57	50	54	50	58	48	46	42	52	50	51	54	53	55	50	48	51	55	54	67	59	54	53	54	73	65	....	54.0
	Minimum	42	47	41	42	41	44	43	41	40	42	41	36	38	42	42	44	49	46	42	41	39	39	35	43	46	43	38	41	53	51	....	42.4

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Canoe Brook	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.192	.136	.152	.200	....	......
	Wind movement	20	41	29	53	72	26	52	71	41	15	51	100	48	35	32	34	54	47	54	95	53	28	43	39	45	28	71	32	69	34	....	1412
Pleasantville**	Evaporation	.042	.510	*	*	.070	.112	.160	.096	.202	.176	.076	*	.138	.064	.018	.120	.054	.288	.032	.064	.224	.160	.192	.320	.032	.320	.224	.256	.256	.192	....	4.398
	Wind movement	127	101	79	96	143	69	107	139	75	64	128	174	148	101	59	46	112	120	91	181	153	61	107	110	106	94	126	76	131	108	....	3232
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	52	46	40	66	29	20	23	90	136	44	86	110	44	45	48	33	50	44	110	114	114	40	53	59	42	80	77	52	53	92	....	1893

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

551.05
UNNJ

[illegible] JUL 1 [illegible] 1933

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVIII. MAY, 1933. No. 5.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Temperatures averaged considerably above the May normal, this being the fifth warmest May on record. This was due chiefly to warm periods at the beginning and towards the latter part of the month. The highest temperatures for the month, with a few exceptions, were recorded on the 27th, and were mostly in the low nineties. The temperature minima reached were mostly in the thirties, except along the coast, and scattered places throughout the State, where they were in the forties. These minima were generally recorded on the 5th or 18th.

Rainfall was abundant, this being the first May since 1924 that the precipitation was above the normal, the monthly average being one and a third times the normal. An interesting feature, perhaps, is the fact that the average rainfall for the month was the same as that for the preceding month of April, namely 4.84 inches. The rainfall during the month was quite consistent, the only dry periods being the 1st-2d and 18-19th. Killing frost occurred on the 8th at Layton, it did little damage however.

Thunderstorms occurred with about the usual frequency, with a few developing destructive proportions. On the 3d, one occurred in the northeast section of the State which did several thousand dollars worth of damage. On the 24th another storm developed to tornadic proportions in the vicinity of Camden and Moorestown and caused an estimated damage of approximately $1,000,000 in that vicinity. F. H. T.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 39 stations, was 63.2°, which was 2.8° above normal. The highest temperature was 93° at 5 stations on the 27th and the lowest, 32°, at Canoe Brook on the 5th and at Layton on the 8th. The greatest daily range of temperature was 44° at Layton and Runyon on the 18th. The highest monthly mean temperature was 66.9° at Burlington, and the lowest, 59.9° at Phillipsburg.

The temperature departure from the normal for the year. 1933, to date, by sections, is: The Highlands, +3.2°; Red Sandstone Plain, +1.2°; Southern Interior, +3.2°; Sea Coast, +3.5°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 4.84 inches, which was 1.11 inches above normal. The greatest monthly precipitation was 6.98 inches, at Camden, and the least, 2.56 inches at Culvers Lake. The greatest amount of precipitation in any 24 consecutive hours was 1.50 inches at Belvidere on the 6th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 2 more than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands. +1.20 inches; Red Sandstone Plain, +1.25 inches; Southern Interior, +2.41 inches; Sea Coast, +1.72 inches.

WIND.

The prevailing wind direction was from the Southwest. The wind movement averaged 10 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 46 miles per hour from the Northwest at Sandy Hook on the 20th.

MISCELLANEOUS.

The per cent of possible sunshine was 58, or 2 per cent below nomal.

The mean atmospheric pressure, reduced to sea level, was 29.96 inches, or 0.03 inch below normal. The highest reading was 30.31 inches at Atlantic City and Camden on the 19th, and and the lowest 29.53 inches at Trenton on the 3d.

The mean stage of the Delaware River at Phillipsburg was 3.0 feet, and the highest 3.8 feet on the 10th.

Thunderstorms occurred generally over the State on the following dates: 3, 20, 21, 24, 27, 30 and 31. A few scattered storms occurred in the north portion on the 13th, 14th and 23d, and in the south portion on the 2d, 9th, 10th, 25th and 26th. A few were observed in both north and south portions on the 28th and 29th.

Dense fog was observed in both sections on the 2d, 22d, 23d and 30th, while it occurred over widely scattered areas in the north on the 29th and in the south on the 3d, 12th, 25th and 31st.

Light hail was observed at Camden on the 24th.

Light frost was experienced at Newton and Somerville on the 5th and at Lambertville on the 7th. Layton reported heavy frost on the 5th and killing on the 8th.

COMPARATIVE DATA FOR MAY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	57.3	−3.1	90	29	2.74	−0.99	5.20	1.18	0	....	....	....	....
1886	58.8	−1.6	87	36	6.07	+2.34	8.46	4.15	0	....	....	....	....
1887	63.3	+2.9	94	35	1.37	−2.36	3.82	**0.08**	0	6	....	....	....
1888	58.6	−1.8	90	26	4.92	+1.19	6.48	3.00	0	16	....	....	...
1889	62.3	+1.9	94	32	4.09	+0.36	6.60	2.43	0	12	....	....	....
1890	60.7	+0.3	87	33	4.24	+0.51	7.17	2.60	0	12	....	....	....
1891	59.5	−0.9	93	28	2.97	−0.76	5.39	1.78	0	9	9	11	11
1892	60.1	−0.3	90	30	5.04	+1.31	6.52	3.26	0	13	8	13	10
1893	59.4	−1.0	95	29	4.07	+0.34	6.38	2.55	0	10	13	8	10
1894	61.4	+1.0	93	30	**7.72**	+3.99	**15.61**	3.57	0	13	11	9	11
1895	60.9	+0.5	**102**	28	2.85	−0.88	3.95	1.66	0	8	12	12	7
1896	**65.3**	+4.9	98	29	3.21	−0.52	4.54	1.62	0	10	10	12	9
1897	60.6	+0.2	87	29	5.68	+1.95	9.11	1.71	0	12	11	12	8
1898	58.5	−1.9	93	29	7.00	+3.27	9.26	3.92	0	18	8	8	15
1899	61.1	+0.7	94	29	1.92	−1.81	3.15	1.15	0	9	12	12	7
1900	60.9	+0.5	98	26	4.71	+0.98	7.33	2.53	0	10	13	7	11
1901	58.6	−1.8	90	29	5.60	+1.87	8.13	3.10	0	16	9	9	13
1902	60.3	−0.1	95	29	2.04	−1.69	4.63	1.11	0	7	15	11	5
1903	62.7	+2.3	98	**21**	**0.59**	−3.14	**1.32**	**0.08**	0	4	16	10	5
1904	62.8	+2 4	97	31	2.60	−1.13	6.69	1.01	0	8	17	9	5
1905	61.4	+1.0	89	22	1.71	−2.02	3.94	0.42	0	8	12	11	8
1906	61.0	+0.6	94	24	4.21	+0.48	6.28	2.37	0	10	16	8	7
1907	55.4	−5.0	91	22	5.05	+1.32	8.09	2.51	0	12	12	9	10
1908	61.6	+1.2	95	29	7.10	+3.37	9.99	4.39	0	13	9	10	12
1909	60.0	−0.4	91	27	2.30	−1.43	4.84	0.79	0	9	10	11	10
1910	60.0	−0.4	94	27	2.54	−1.19	4.25	1.48	0	12	10	10	11
1911	64.5	+4.1	99	22	1.37	−2.36	3.81	0.31	0	7	14	11	6
1912	62.0	+1.6	92	31	4.09	+0.36	6.47	2.79	0	11	11	11	9
1913	60.3	−0.1	94	25	3.45	−0.28	4.86	2.53	0	9	15	7	9
1914	63.1	+2.7	98	30	2.93	−0.80	5.09	0.95	0	10	14	9	7
1915	58.1	−2.3	88	30	3.82	+0.09	6.15	2.00	0	13	13	7	11
1916	61.1	+0.7	90	33	3.48	−0.25	5.27	2.14	0	12	12	11	8
1917	**54.0**	−6.4	90	25	3.83	+0.10	6.83	2.08	0	11	10	10	11
1918	64.6	+4.2	93	31	4.94	+1.21	7.59	2.74	0	12	14	10	7
1919	60 9	+0.5	95	31	4.98	+1.25	7.68	3.06	0	12	14	6	11
1920	57 4	−0.3	89	26	3.00	−0.73	5.23	1.61	0	10	15	8	8
1921	60.2	−0.2	96	32	4.17	+0.44	6.44	2.60	0	10	14	7	10
1922	63.0	+2.6	90	23	3.84	+0.11	7.55	1.16	0	8	18	6	7
1923	59.1	−1.3	90	25	1.66	−2.07	3.62	0.67	0	6	20	6	5
1924	56.8	−3.6	87	25	5.69	+1.96	7.94	3.36	0	17	12	7	12
1925	57.7	−2.7	99	23	2.86	−0.87	4.94	0.49	0	8	13	11	7
1926	59.1	−1.3	90	26	2.58	−1.15	4.52	1.08	0	9	18	9	4
1927	58.1	−2.3	88	30	3.65	−0.08	8.16	1.93	0	13	9	10	12
1928	58.0	−2.4	93	27	2.23	−1.50	3.49	1.26	0	12	12	9	10
1929	59.9	−0.5	95	26	3.49	−0.24	5.58	1.26	0	13	13	8	10
1930	62.7	+2.3	98	31	2.75	−0.98	4.50	1.54	0	9	17	7	7
1931	60.4	0.0	97	**21**	3.73	0.00	2.20	0.77	0	12	14	6	11
1932	60.5	+0.1	94	29	2.98	−0.75	5.61	1.60	0	8	16	8	7
1933	63.2	+2.8	93	32	4.84	+1.11	6.98	2.56	0	13	11	8	12
Period	60.4	....	102	21	3.73	....	15.61	0.08	0	11	13	9	9

W. B. O. Philadelphia-6-28-33-875.

Climatological Data for May, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	64.8^{b}	+4.1	91	27	37	5	40	5.14	+1.31	1.50	0	14	15	2	14	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	61.4	+3.9	90	28	33	6	42	3.71	−0.49	0.86	0	15	13	9	9	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	40	8†	....	2.56	−1.07	0.55	0	8	11	12	8	s.	Brice E. Riker.
Dover	Morris	600	49	61.6	+3.0	87	27	36	5	40	4.83	+0.89	1.42	0	13	5	9	17	......	William C. Harris
Layton	Sussex	480	32	61.1	+3.1	88	20	32	8	44	3.25	0.00	0.98	0	10	9	5	17	sw.	A. M. Depue.
Long Valley	Morris	520	3	61.2	......	87	27	37	5†	40	4.29	....	0.94	0	14	11	4	16	s.	S. N .Dilts.
Newton	Sussex	769	50	61.8	+2.3	86	20†	36	5	33	3 47	−0.46	0.89	0	11	10	6	15	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	59.9	−1.4	90	27	38	5	28	5.64	+1.78	0.79	0	15	11	8	12	......	Town Engineer.
Sussex	Sussex	442	38	61.7	+1.8	82	1†	35	5	42	3.35	−0.37	0.78	0	13	10	8	13	......	A. J. W. Mowatt
Means and extremes	....	......	....	61.7	+2.4	91	27	32	8	44	4.03	+0.20	1.50	0	13	11	7	13	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	61.6	+2.4	89	27	36	5	40	4.55	+0.49	1.20	......	11	12	2	17	ne.	John Kline.
Canoe Brook	Essex	173	3	61.2	......	89	27	32	5	43	4.97	....	0.95	......	13	14	4	13	w.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	......	......	......	......	....	......	....	....	......	....	....	....	....	......	Paul Molitor, Sr.
Elizabeth	Union	45	54	64.8^{a}	+2.8	92	27	41	18	40	4.47	+0.65	1.11	0	16	15	3	13	sw.	Union County Park Comm.
Flemington	Hunterdon	140	§47	64.6	+3.3	91	27	39	5	39	6.25	+2.23	1.11	0	15	13	7	11	sw.	Hiram E. Deats.
Jersey City	Hudson	10	35	63.2	+1.6	88	27	45	6†	27	5.39	+1.81	1.25	0	12	6	10	15	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	46	62.0	+0.4	87	27	41	5†	34	6.49	+2.47	1.21	0	18	13	4	14	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	63.6	+3.9	91	27	38	5	41	4.28	+0.49	1.00	0	14	15	5	11	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	63.5	+3.1	91	27	40	18	37	6.80	+2.91	1.15	0	15	14	9	8	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	......	15	......	......	......	......	......	......	....	3.72	....	0.78	......	13	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	64.4	+2.9	92	27	42	5	38	3.14	−1.30	0.57	0	12	12	3	16	w.	William H. Meyer.
Plainfield	Union	120	45	62.3	+2.1	89	27	39	18	41	5.66	+1.74	1.07	0	16	7	9	15	sw.	S. K .Pearson.
Ridgefield	Bergen	80	16	63.2	......	90	27	43	5†	36	4.67	....	1.25	0	13	9	10	12	s.	George P. Kirsten.
Somerville, (near)	Somerset	70	50	62.9	+2.1	89	27	35	5	41	5.98	+2.13	1.02	0	16	11	5	15	w.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	....	....	3.65	....	1.03	......	14	....	....	....	......	Hackensack Water Co.
New York, N. Y.	....	365	63	62.8	+2.2	86	27	45	8	26	5.93	+2.69	1.27	0	13	5	11	15	sw.	U. S. Weather Bureau.
Means and extremes	....	......	....	63.1	+2.5	92	27	32	5	43	5.00	+1.36	1.25	0	14	12	6	13	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	63.4	+2.3	92	27	35	18	40	4.47	+0.65	1.09	0	8	10	5	16	se.	A. F. Waldron.
Bridgeton	Cumberland	30	50	64.8	+0.8	91	27	41	5	36	3.22	−0.62	0.77	0	9	16	9	6	se.	Bennett K. Matlack
Burlington	Burlington	12	§47	66.9	+5.0	93	26†	40	13	41	5.02	+0.81	1.20	0	9	12	12	7	nw.	Public Service Power Co.
Camden	Camden	20	1	65.8	......	93	27	43	5	36	6.98	....	1.42	0	17	7	12	12	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	63.4	......	92	27	41	5†	36	4.93	+1.09	0.92	0	13	14	9	8	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	65.6^{e}	......	91	27	41	5	28^{e}	4.28	0.00	0.80	0	12	16	8	7	sw.	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	64.4	+3.1	91	27	39	18	41	5.19	+1.24	0.91	0	15	13	9	9	se.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	65.2	+3.1	93	27	38	18	42	5.31	+2.07	1.10	0	11	8	12	11	sw.	James M. Armstrong.
Lakewood	Ocean	54	29	64.2	+4.0	92	27	37	18	37	3.99	+0.59	0.87	0	16	12	6	13	sw.	R. W. Holman.
Moorestown	Burlington	......	70	64.0	+2.7	90	27	41	5	36	5.85	+1.83	1.37	0	15	6	16	9	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	5.14	+1.67	0.87	0	14	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	65.8	......	90	27	42	5†	38	5.21	....	1.09	0	16	17	7	7	e.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	62.7	......	89	27	39	18	32	5.56	+2.30	0.90	......	13	17	8	6	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	4.68	....	1.00	0	9	9	15	7	e.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	63.2	......	93	27	35	5	44	6.12	....	1.31	......	9	16	9	6	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	64.2	+3.1	90	27	44	9	32	4.91	+1.83	0.92	0	15	5	14	12	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	......	......	......	....	5.77	....	1.03	0	16	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	61.8	+1.9	85	24†	38	6	28	5.55	+1.81	0.86	0	14	13	9	9	nw.	John H. Brown.
Philadelphia, Pa	....	114	62	66.8	+3.4	89	27	45	8	24	6.93	+3.67	1.74	0	16	4	10	17	sw.	U. S. Weather Bureau.
Means and extremes	....	......	....	64.4	+2.9	93	26†	35	5†	44	5.12	+1.27	1.42	0	13	12	10	9	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	62.2^{a}	+3.4	93	27	45	8	29	4.89	+1.81	1.15	0	13	17	9	5	sw.	Information Bureau.
Atlantic City	Atlantic	16	60	61.2	+3.1	87	14	46	9	26	4.32	+1.27	0.93	0	13	4	10	17	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	62.2	+4.0	92	27	40	18	30	5.31	+1.55	1.17	0	11	7	10	14	se.	William D. Martin.
Sandy Hook	Monmouth	22	35	61.6	+3.2	87	27	44	8	22	4.93	+1.21	1.18	0	15	5	9	17	s.	U. S. Weather Bureau.
Means and extremes	....	......	....	61.8	+3.4	93	27	40	18	30	4.86	+1.34	1.18	0	13	8	10	13	s.	
For the State	....	......	....	63.2	+2.8	93	26†	32	5†	44	4.84	+1.11	1.50	0	13	11	8	12	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for May, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						1.50		.14	.02	.57	.03		.19	.18		.80					.62			.32				.12	.15	.47	.03	5.14
Charlotteburg	Passaic			.56	.43		.16	.36			.26		.26	.10	.06		.10	.06				.26			.14				.10		.78	.08	3.71
Culvers Lake	Delaware			.55			.53	T.		T.	.26			T.	T.		.42				.20			.10				T.		T.	.48	.05	2.59
Dover	Passaic			1.42			.80				.45	.01	T.	*	.14		.45				.56				.11				.20	*	.57	.12	4.83
Layton	Delaware			.53			.55			T.	.42						.36				.98				.05				.06	.09	.15	.06	3.25
Long Valley	Morris			.55			.46		.10		.64		T.	.11	.16		.54	.05			.35				.11	.05			.20		.94	.03	4.29
Newton	Delaware			.50			.58	.04	T.	.29		T.	.11	.04		.35					.48			.08							.89	.11	3.47
Phillipsburg	....do	T.	T.	.72		T.	.79	.03	.41	.03	.58	.09	T.	.27	.03	T.	.63				.68				.50	T.	T.	T.	.21	.48	.19	T.	5.64
Sussex	Hudson			.64	.19		.23	.08			.24			.03	.03		.04	.19				.78			.18			.35			.37		3.35
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic			T.	1.20		.10	.75			.43		T.	T.	T.	.08		.34				.44				.10			.20		.76	.15	4.55
Canoe Brook ‖‖	Essex				.91		.19	.95		.03	.56				.03	.07	T	.63				.33				.06			.55		.54	.12	4.97
Chatham ‖	....do																																
Elizabeth	Coast			.37	.01		.35	.25	.10	T.	.71	.01		.01	.02	T.	.30	.09				.43	.01		.04	T.			1.11			.66	4.47
Flemington	Raritan			.42			.94	.13	.55	.03	.89	.03	T.	.11	.01		.40					.58			.56			T.	.35		1.11	.15	6.25
Jersey City	Coast			.65			1.25			.01	.68	T.		T	.06		.52				.27				.05			.10	.70	T.	.25	.85	5.39
Lambertville	Delaware			.44			1.09	.02	.56	.06	.80	.03	.06		.09	.05		.60	.04			1.21			.54				.59	.04	.25	.02	6.49
Little Falls ‖‖	Passaic				.84		.11	1.00			.50			.01	.02	.13	.01	.22				.38				.11			.29		.56	.10	4.28
New Brunswick	Raritan			.21	.18		1.15	.20	.65	.03	.62	T.		T.			.42	.17				.93			.19	.05		T.	1.06		.22	.72	6.80
New Milford ‖‖	Hackensack				.78		.05	.39			.43					.24	.04	.14				.58				.11			.44	.04	.28	.20	3.72
Paterson	Passaic			.16			.50	.17		T	.40			.03	.10		.29					.37			.10				.33	T.	.57	.12	3.14
Plainfield	Raritan			.61			1.07	.07	.40	T.	.68	.01	T.	.06	.02		.50				.25				.11			.04	.42	.02	.50	.90	5.66
Ridgefield**	Hackensack			1.25			.60	.19		.02	.45	T.		.01	.09		.23				.37				.07				.30		.85	.24	4.67
Somerville	Raritan			.51			1.02	.07	.58		.80	.02		.10	.02		.54				.89				.22	.02			.43	.13	.32	.31	5.98
Woodcliff Lake ‖‖	Hackensack				1.03		.03	.44			.34				.04	.03	.06	.10				.36				.11			.19	.17	.36	.39	3.65
New York, N. Y***	Coast	T.		1.26		T.	1.27			.04	.63	T.		T.	.06	T.	.49				.25				.05			.52	.25	.08	.16	.87	5.93
The Southern Interior.																																	
Belleplain	Tuckahoe				.61			T.		1.02	.60						.61					.34						*	1.09		T.	.20	4.47
Bridgeton	Delaware			.02		.03	.31		.77		.31	T				.06	.72											T.	.62		T.	.38	3.22
Burlington	Delaware			.10					1.20		.09						.40				.80				.85				.58		.30	.70	5.02
Camden***	..do			.22		.10	.86		.65	.22	.55	.23	.01	T.	.05		.41				.74				1.25			.16	.08	.02	.01	1.42	6.98
Freehold	Raritan			.32			.92		.72	.08	.70	T.	T.	.05	.04		.54					.48			.30		.06		.42	T.		.30	4.93
Hammonton	Mullica			.10			.50	.20	.77		.59		.02				.74	.05				.20			.80	T.			.22			.09	4.28
Hightstown	Raritan			.20			.91			.68	.80			.06		.04	.49	.19				.39			.03	.25		.18	.34		.33	.30	5.19
ndian Mills	Mullica			.16			.88		.81	T	.66		.09		T		.67					.30			1.10			.12	32		T.	.20	5.31
akewood	Metedeconk			.18			.48	.20	.55	.05	.87			.07	.05		.40	.05				.40			.19	.04	T.		.12		.19	.15	3.99
Moorestown ‖‖	Delaware			.02	.13		.35	.34		.65	.85		.14	.03	T.	.02	.18	.41				.48				1.37			.58			.30	5.85
Northfield	Coast			.32			.49	.01	.87		.78		.14			.02	.47					.35			.63			.10	.25		.03	.68	5.14
Pemberton	Delaware			.06			.54	.22	.54	.06	.84		.04		T.	.04	.42	.03				.37			.14	1.09			.37	T.	.08	.37	5.21
Pleasantville ‖‖	Coast				.76		.50	.11		.90	.82		.12	T.	.05		.42	.12				.34				.30			.65			.47	5.56
Port Norris	Maurice				.28		.55	T.	1.00	T.	.59			.14			.63					.45				.30			.74				4.68
Runyon	Coast			.35			1.31		.61								.47					1.17			.57				.74		.22	.68	6.12
Trenton***	Delaware		T.	.13		.03	.90		.59	.25	.56	T.	.07		.02		.58				.30				.40	T.		.12	.05	.23	T.	.68	4.91
Trenton No. 2 ‖‖	....do			.01	.19		.38	.65		.78	.84		.02	.11	T.	.06	.11	.66				.48				.41			.29		.33	.45	5.77
Tuckerton	Coast			.03			.72	.20	.31	.21	.26	.09	.86				.62					.33			.85			.82			.03	.22	5.55
Phila., Pa***	Delaware			.31		.02	.62		.69	.18	.57	.27	.03	T	T.		.50				.76				1.74	T.		.68	.01	.01	.43	.11	6.93
The Sea Coast.																																	
sbury Park	Coast			.07			1.15		.60		.90	T.		.05	.04		.52				.32				.60			.04	.10		.23	.27	4.89
tlantic City***	....do			.07	T.	.01	.48		.93		.56	.13	T.	T.	.01		.53				.31		T.		.30		T.	.36	T.		.35	.28	4.32
ong Branch**	....do			.28			1.17		.58		.70	T.	T.		.14		.52				.85				.16			T.	.49	T.	.29	.13	5.31
andy Hook***	....do			.30		.03	1.15		.56	.05	.65	T.		T.	.01		.55				.57				.06	T.		.05	.45	.10	.11	.29	4.93

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipi-ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
tlantic City	29.97	30.31	19	29.58	3	14.1	37	s.	27	82	74	86	64
amden	29.97	30.31	19	29.56	3	8.0	45	nw.	24	73	55	71	......
ong Branch	29.96	30.27	19	29.55	3	......	......	......	......	80	65	70	50
ew York, N. Y	29.94	30.25	18	29.55	3	12.2	51	nw.	20	75	62	68	53
hiladelphia, Pa	29.97	30.31	19	29.57	3	11.6	68	nw.	24	73	56	68	54
idgefield	29.94	30.24	18	29.54	3	......	......	......	......	......	......	......	......
andy Hook	29.95	30.26	18	29.56	3	10.6	46	nw.	20	82	68	79	56
renton	29.96	30.29	19	29.53	3	8.4	32	nw.	20	77	56	72	62

Daily Temperatures for May, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	82	83	87	...	77	57	73	65	58	67	64	65	74	73	82	71	75	83	83	89	81	82	83	81	82	89	91	36	82	74	76	77.2^{a}
	Minimum	57	60	....	....	37	47	46	43	44	48	40	51	58	59	49	48	42	43	47	58	60	48	47	59	60	56	66	63	57	60	63	53.2^{b}
Charlotteburg	Maximum	76	74	72	70	68	65	70	69	61	63	65	68	73	81	76	76	70	79	79	84	85	74	81	33	76	85	87	90	77	64	72	74.6
	Minimum	52	57	56	43	35	33	42	35	44	39	36	46	53	58	47	50	34	60	42	57	53	39	39	51	56	48	59	61	49	57	61	48.2
Dover	Maximum	79	75	73	66	64	53	73	60	57	67	65	65	72	70	79	67	74	79	79	85	77	78	77	78	80	86	87	79	69	64	71	72.5
	Minimum	50	58	57	45	36	45	44	41	45	50	39	50	55	54	51	48	40	39	51	59	55	45	45	59	59	54	64	63	55	58	62	50.8
Layton	Maximum	79	77	72	64	65	56	73	62	59	67	64	71	72	72	78	65	75	80	78	88	74	74	78	77	82	84	87	77	75	70	75	73.2
	Minimum	56	60	66	44	33	44	40	32	43	46	34	44	58	56	46	50	44	36	42	57	57	40	39	52	54	52	61	59	52	60	61	49.0
Long Valley	Maximum	78	78	75	70	63	60	70	62	63	67	65	63	73	73	77	66	72	77	76	84	75	77	79	78	80	77	87	80	75	67	75	73.0
	Minimum	53	56	58	44	37	44	44	38	37	44	39	49	55	56	51	46	46	37	42	57	54	45	43	57	56	52	60	61	52	58	61	49.4
Newton	Maximum	78	76	73	67	64	57	71	65	60	65	66	68	71	72	77	67	75	78	76	86	75	76	78	77	79	84	86	79	76	72	73	73.1
	Minimum	53	58	57	43	36	42	42	40	42	44	39	48	52	55	52	46	42	45	48	55	50	58	47	58	55	59	64	60	54	57	60	50.4
Phillipsburg	Maximum	66	81	70	61	55	56	58	59	53	57	57	64	72	72	66	68	56	68	64	82	67	68	77	69	76	77	90	78	67	68	68	67.4
	Minimum	56	60	60	47	38	46	45	43	45	48	40	53	59	57	50	48	43	43	46	57	58	49	49	58	59	59	65	63	56	61	63	52.4
Sussex	Maximum	82	81	78	63	63	58	71	70	54	63	65	67	72	71	71	63	82	82	81	81	72	79	77	74	70	82	82	74	73	67	73	72.2
	Minimum	54	59	60	45	35	46	42	41	44	47	38	48	57	59	49	53	40	42	48	57	58	46	44	57	57	53	65	62	59	59	63	51.2
The Red Sandstone Plain.																																	
Boonton§§	Maximum	78	77	84	68	65	53	72	58	58	73	66	66	72	72	78	61	74	77	76	86	76	77	77	82	81	85	89	82	64	69	75	73.3
	Minimum	52	56	57	47	36	45	42	40	45	42	39	47	54	56	48	54	40	37	44	53	55	47	44	53	54	56	63	63	54	59	61	49.9
Canoe Brook§§	Maximum	80	75	73	67	67	59	72	57	57	68	66	66	75	73	78	61	72	79	78	85	77	78	78	82	81	85	89	81	76	67	74	73.4
	Minimum	53	53	55	47	32	46	41	35	43	46	36	46	54	60	48	53	36	36	41	58	54	45	43	54	58	51	60	62	53	58	61	49.0
Elizabeth	Maximum	86	78	76	77	65	65	81	68	60	69	69	67	75	71	83	76	74	81	84	88	82	81	82	80	82	89	92	80	77	69	74	76.8
	Minimum	55	57	57	50	42	46	45	46	45	49	42	51	55	59	52	50	43	41	46	....	59	55	50	58	59	60	65	63	58	60	63	52.7^{a}
Flemington	Maximum	80	84	82	70	64	59	78	71	58	71	67	67	79	74	80	73	78	81	79	88	82	83	81	81	87	89	91	83	75	71	77	76.9
	Minimum	54	56	61	47	39	45	45	42	43	47	41	54	56	60	53	49	45	42	45	58	60	48	50	57	59	59	64	63	57	60	63	52.3
Jersey City	Maximum	76	70	70	66	64	53	72	58	58	69	66	68	74	73	80	70	70	76	78	84	76	77	78	79	81	87	88	79	70	65	73	72.5
	Minimum	55	55	55	49	48	45	45	45	48	47	47	52	55	58	56	47	50	49	52	59	58	54	55	60	60	65	64	60	58	59	61	53.9
Lambertville	Maximum	79	79	74	65	62	53	70	65	56	66	63	65	66	76	73	75	65	71	77	84	79	76	78	79	81	84	87	77	78	75	76	72.7
	Minimum	53	56	53	46	41	44	43	41	42	45	43	44	48	56	60	54	45	43	43	57	60	50	52	57	59	61	62	63	58	60	53	51.4
Little Falls§§	Maximum	77	76	74	69	67	56	76	58	59	70	68	69	76	73	81	67	77	81	80	88	79	82	81	82	83	88	91	82	76	69	75	75.2
	Minimum	55	56	57	48	38	47	44	42	45	48	40	50	55	58	55	55	40	40	47	61	57	52	47	59	57	55	62	62	56	59	62	51.9
New Brunswick	Maximum	79	79	73	72	64	54	72	69	58	67	67	65	76	75	77	74	70	77	77	85	84	76	82	78	80	87	91	81	75	68	75	74.4
	Minimum	52	56	59	48	42	45	44	42	44	47	42	51	54	61	53	48	42	40	47	59	60	54	51	58	60	62	66	63	58	60	62	52.6
Paterson	Maximum	77	76	69	68	67	55	75	72	58	69	66	70	74	72	81	73	74	81	80	88	82	80	81	81	80	88	92	83	75	67	73	75.1
	Minimum	56	58	59	59	42	46	46	46	47	49	44	52	56	58	55	48	45	43	43	60	59	53	50	59	58	62	66	63	58	60	62	53.6
Plainfield	Maximum	81	79	70	67	65	52	73	55	59	69	67	66	74	73	80	71	71	80	79	86	76	77	79	77	82	87	89	79	71	65	73	73.3
	Minimum	53	55	55	47	47	45	42	45	43	47	42	46	55	59	50	47	42	39	45	57	59	51	48	58	58	57	64	58	56	59	60	51.3
Ridgefield	Maximum	76	73	71	67	64	52	74	56	59	70	66	69	75	73	80	60	72	79	80	87	79	77	80	81	82	87	90	80	62	70	74	73.1
	Minimum	56	56	58	49	43	46	45	47	47	49	44	53	56	58	55	47	43	43	51	56	56	54	50	59	58	60	69	62	58	59	62	53.2
Somerville	Maximum	82	84	77	67	65	53	73	60	59	68	67	69	77	75	79	64	74	81	78	85	79	79	79	81	81	87	89	80	74	71	78	74.7
	Minimum	52	55	60	47	35	46	43	42	44	47	39	51	56	59	49	49	40	40	43	58	55	47	48	55	58	58	66	64	55	61	62	51.1
New York, N. Y.	Maximum	72	66	70	65	62	53	71	59	56	67	65	69	72	72	78	69	70	73	76	82	76	76	76	79	79	84	86	78	68	65	73	71.2
	Minimum	55	55	55	49	49	45	45	45	48	57	48	53	54	58	57	47	50	52	53	60	57	55	57	60	60	67	64	61	58	59	61	54.3
The Southern Interior.																																	
Belleplain	Maximum	79	78	78	68	62	68	61	53	55	77	65	66	80	86	80	65	69	75	75	88	81	74	79	87	85	87	92	77	81	81	77	75.1
	Minimum	55	54	58	48	40	44	44	46	43	45	42	49	54	62	56	45	44	35	36	59	59	51	47	62	60	64	68	65	55	55	62	51.8
Bridgeton	Maximum	77	77	76	69	68	52	70	64	64	73	74	68	78	84	78	67	74	75	76	87	81	79	78	87	83	90	91	80	83	82	78	76.2
	Minimum	55	56	58	49	41	48	43	43	43	48	45	52	52	48	56	55	45	43	46	59	62	55	53	61	61	66	67	65	59	64	61	53.5
Burlington	Maximum	83	85	84	85	72	64	72	68	63	73	74	83	75	78	83	82	71	83	84	86	83	85	86	87	86	93	89	80	93	82	82	80.5
	Minimum	48	56	61	46	44	45	41	44	44	48	45	52	40	52	53	53	43	42	46	68	62	55	54	59	62	64	71	64	60	63	63	53.8
Camden	Maximum	84	85	78	67	65	52	70	58	63	73	66	70	77	83	80	64	71	80	80	89	81	78	83	84	84	90	93	82	80	41	79	76.7
	Minimum	54	57	60	49	43	46	46	44	45	49	46	54	56	61	59	49	44	44	49	62	59	56	59	63	62	66	70	64	62	64	64	55.0
Freehold	Maximum	79	79	76	67	65	52	70	64	58	69	61	67	80	78	78	74	67	77	80	88	83	75	80	81	82	87	92	89	75	72	73	74.8
	Minimum	49	56	55	47	41	45	42	43	43	48	42	51	54	66	54	49	41	41	45	58	59	51	49	56	60	62	62	63	57	60	60	51.9
Hammonton	Maximum	79	80	78	76	64	55	70	64	62	74	62	70	83	85	....	....	....	....	....	88	80	76	79	84	82	87	91	81	79	78	78	76.3^{e}
	Minimum	55	57	59	49	41	48	45	44	44	46	48	50	55	67	....	....	....	....	....	63	61	54	55	60	62	61	64	63	59	57	63	55.0^{e}
Hightstown	Maximum	82	84	73	71	69	56	70	69	61	68	68	70	77	78	78	73	74	80	78	86	81	78	81	81	81	87	91	80	77	77	77	76.0
	Minimum	53	56	58	47	40	47	44	42	43	47	43	52	55	65	52	50	41	39	47	59	59	53	52	59	61	61	69	63	57	60	62	52.8
Indian Mills	Maximum	82	83	77	70	64	54	69	64	62	73	70	70	85	84	79	73	71	80	82	90	81	79	83	84	83	89	93	78	82	81	77	77.2
	Minimum	57	55	58	48	49	48	45	42	43	48	42	53	56	65	55	52	40	38	40	60	59	50	53	57	60	64	68	65	55	62	63	53.2
Lakewood	Maximum	79	76	77	74	67	55	70	65	58	69	67	70	83	81	78	75	67	74	81	88	83	74	77	83	82	87	92	80	75	73	74	75.3
	Minimum	55	57	59	49	39	47	45	44	44	50	43	52	54	67	54	52	40	37	46	58	59	50	49	58	61	61	68	63	56	62	64	53.0
Moorestown	Maximum	80	81	75	65	63	51	68	56	61	71	65	69	76	82	77	63	69	78	77	86	79	77	80	82	82	86	90	77	83	80	77	74.4
	Minimum	51	56	57	47	41	46	45	43	45	49	43	54	56	57	56	47	43	42	48	60	57	53	55	62	62	65	68	65	60	63	61	53.5
Pemberton	Maximum	81	82	78	73	69	57	71	71	60	72	69	71	79	81	75	74	74	80	79	86	84	81	81	82	82	86	90	89	85	79	78	77.4
	Minimum	54	57	60	48	42	48	45	44	44	49	44	53	58	65	53	53	44	42	45	59	61	53	54	59	62	63	69	65	58	63	64	54.1
Pleasantville§§	Maximum	69	69	70	68	55	55	66	53	61	76	61	62	74	87	80	66	63	69	70	88	77	68	71	87	86	88	89	76	77	75	74	71.9
	Minimum	55	53	56	49	43	50	45	48	43	48	44	51	55	57	57	59	44	39	41	57	60	55	51	55	61	65	67	66	57	62	64	53.5
Runyon	Maximum	80	82	83	74	65	72	76	72	60	72	60	72	80	79	81	65	77	80	80	82	81	82	83	83	83	88	93	83	79	78	78	77.5
	Minimum	39	50	49	47	35	47	41	47	47	42	37	37	50	65	37	50	50	36	41	57	55	42	41	54	57	56	61	63	61	57	62	48.8
Trenton	Maximum	79	79	75	66	62	51	70	54	59	67	66	69	76	77	75	65	72	79	77	87	79	78	80	80	82	86	90	79	83	76	77	74.0
	Minimum	55	57	58	48	45	45	46	44	44	48	46	54	55	59	56	48	46	47	50	61	62	52	55	61	62	65	66	64	61	61	61	54.3
Tuckerton	Maximum	62	79	70	65	62	60	68	58	60	68	61	70	64	80	77	65	68	70	70	70	70	72	70	85	80	85	80	80	75	75	72	70.7
	Minimum	52	58	56	49	43	38	40	40	40	45	50	50	50	60	60	49	45	50	59	60	52	50	55	60	60	62	59	62	61	60	62	52.8
Philadelphia, Pa.	Maximum	79	80	74	66	65	53	70	59	61	72	64	69	75	82	78	67	73	78	76	86	81	78	79	84	83	88	89	78	84	80	76	75.1
	Minimum	57	59	55	49	48	49	50	45	47	50	52	56	58	63	62	51	50	54	54	62	66	62	59	62	65	70	70	65	65	65	64	57.5
The Sea Coast.																																	
Asbury Park	Maximum	59	57	62	69	66	53	68	59	55	67	63	68	61	78	78	70	62	63	73	87	79	68	65	81	78	86	93	76	92	64	....	70.0^{a}
	Minimum	49	48	50	51	50	47	46	45	46	50	48	52	53	57	57	52	47	46	50	62	62	59	56	58	63	69	68	65	63	62	....	54.4^{a}
Atlantic City	Maximum	64	63	65	68	55	52	65	55	56	69	58	60	64	87	81	63	60	62	64	68	72	64	62	82	84	81	81	71	71	70	71	67.4
	Minimum	53	52	54	50	49	48	48	47	46	51	49	52	53	61	60	51	48	46	56	58	59	54	54	60	65	68	64	61	61	63	63	54.9
Long Branch	Maximum	71	68	67	70	59	53	71	54	57	69	62	62	70	77	79	63	66	70	78	88	81	70	72	82	82	88	92	76	69	68	72	71.2
	Minimum	57	53	53	50	48	48	46	42	45	49	44	50	53	59	54	50	44	40	48	59	59	54	51	59	60	62	70	59	58	62	63	53.2
Sandy Hook	Maximum	69	64	67	64	59	53	68	56	54	66	60	64	69	72	73	63	64	69	75	81	76	71	72	78	78	84	87	75	65	64	69	68.7
	Minimum	54	51	52	51	49	46	49	44	49	50	51	53	54	58	57	49	50	51	53	60	56	55	55	59	59	65	66	61	60	61	61	54.5

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Canoe Brook	Evaporation	.168	.184	.110	.224	.110	*	.182	.078	.072	.072	.048	.048	.062	.086	.192	.110	.208	.224	.224	.186	.184	.208	.192	.044	.080	.208	.198	.168	.044	*	.084	3.998
	Wind movement	49	47	59	38	30	26	30	23	24	37	20	17	23	26	24	25	18	22	22	29	24	20	12	21	11	8	14	20	9	40	21	789
Pleasantville**	Evaporation	.256	.240	.152	.320	.132	.046	.208	.084	.180	.192	.056	.080	.146	.272	.824	.008	.240	.240	.240	.244	.272	.160	.240	.140	.192	.272	.330	.176	.192	.134	.076	5.844
	Wind movement	91	97	98	92	80	84	103	53	111	70	65	52	44	66	106	74	59	45	54	96	76	60	42	86	48	36	41	74	33	67	31	2134
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

.05
NJ

AUG 17 1933

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
HARRY O. GEREN, Meteorologist.
TRENTON, N. J.

VOL. XXXVIII. JUNE, 1933. No. 6.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Cool weather prevailed at the beginning of the month, especially in the more northern districts, and was followed by a decided warm period which reached its greatest development on the 9th. This, in turn, was succeeded by another cool spell during which the lowest temperatures were observed on the 15th. The remainder of the month experienced a much more even course of temperature with most of the daily averages above the normal. In the warm period of the 3d to 12th, inc., maximum temperatures near and above the 100-degree mark were recorded, except near the sea coast; in the following cool period the lowest temperatures were mostly in the low forties and high thirties, with one station experiencing the freezing point. The State average for the month, 71.0 degrees, was the highest since that of the record breaking June of 1925.

Rainfall for the State as a whole was about 75% of the normal, ranging from 64% in the Southern Interior to 81% in the Red Sandstone Plain. Nearly all of the rain fell during the first eighteen days, except at a few scattered stations which had heavy local rains during the last few days of the month.

A small tornado was reported to have occurred at National Park, Gloucester County, at 6 p. m. of the 7th. Two persons were seriously injured, two houses carried away, and other damage done. The loss is estimated at $15,000. Destructive winds of less violence occurred at the same time in other nearby counties. During the early morning of the 10th, the wind unroofed a number of houses, blew down trees and wires in Hunterdon County and portions of Mercer and Somerset counties. No estimate of the damage has been made.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 71.0°, which was 2.2° above normal. The highest temperature was 105° at Elizabeth on the 10th, and the lowest, 32°, at Layton on the 2d. The greatest daily range of temperature was 48° at Layton on the 3d. The highest monthly mean temperature was 74.0° at Burlington and Camden, and the lowest, 68.2° at Canoe Brook.

The temperature departure from the normal for the year, 1933, to date, by sections, is: The Highlands, +3.2°; Red Sandstone Plain, +1.4°; Southern Interior, +3.0°; Sea Coast, +3.4°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 2.79 inches, which was 0.92 inch below normal. The greatest monthly precipitation was 5.71 inches, at Runyon, and the least, 0.52 inch at Belleplain. The greatest amount of precipitation in any 24 consecutive hours was 3.10 inches at Indian Mills on the 26th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 9, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands. —0.08 inch; Red Sandstone Plain, +0.49 inch; Southern Interior, +0.99 inch; Sea Coast, +0.63 inch.

WIND.

The prevailing wind direction was from the West. The wind movement averaged 11 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 50 miles per hour from the Southwest on the 5th at Sandy Hook

MISCELLANEOUS.

The per cent of possible sunshine was 70, or 9 per cent above nomal.

The mean atmospheric pressure, reduced to sea level, was 29.93 inches, or 0.05 inch below normal. The highest reading was 30.24 inches at Camden on the 15th, and the lowest 29.63 at Long Branch on the 3d.

The mean stage of the Delaware River at Phillipsburg was 1.5 feet, and the highest 2.5 feet on the 1st. At Trenton the mean stage was 1.1 feet, and the highest 2.3 feet on the 8th.

Thunderstorms occurred on the following dates: 1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 17, 21, 22, 26, 27 and 30. Dense fog was observed quite generally throughout the State on the 25th, 26th, 27th, 28th, 29th and 30th. Light to moderate hail fell in scattered sections in the northern part of the State on 3d, 5th, 6th, 10th and 17th. In the southern section Indian Mills had light hail on the 3d. Light frost occurred at Belvidere on the 15th, and heavy frost was experienced at Layton on the 2d and15th.

ERRATA.

January 1933. Asbury Park, partly cloudy days 7, cloudy days 2. Bridgetou, maximum temperature for the month 62 on the 23d. February 1933. Indian Mills, clear days 11, cloudy days 8 Phillipsburg, mean stage of river 3.3 feet. March 1933. Asbury Park, total monthly precipitation 6.40 inches. For the State 4.95 inches a departure of +1.17. May 1933. Flemington, total precipitation 6.26 inches.

COMPARATIVE DATA FOR JUNE

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	68.7	−0.1	97	39	1.79	−1.92	3.37	0.72	0	....	....	....	....
1886	67.1	−1.7	91	41	3.38	−0.33	5.79	2.22	0	....	....	....	....
1887	68.2	−0 6	97	42	6.77	+3.06	10.29	4.21	0	10	....	....	....
1888	70.8	+2.0	99	39	2.59	−1.12	5.69	1.67	0	6	....	....	....
1889	69.9	+1.1	91	40	3.73	+0.02	6.75	2.39	0	10	....	....	....
1890	70.7	+1.9	95	42	3.59	−0.12	5.16	0.99	0	7	11	13	6
1891	69.7	+0.9	102	38	2.92	−0.79	6.71	1.24	0	5	14	9	7
1892	72.4	+3.6	98	44	3.85	+0.14	6.12	1.58	0	11	10	12	8
1893	69.7	+0.9	103	40	2.95	+0.76	7.02	0.46	0	8	10	11	9
1894	70.6	+1.8	102	35	2.28	−1.43	5.90	0.99	0	9	14	11	5
1895	71.7	+2.9	103	39	3.24	−0.47	5.99	0.93	0	10	11	11	8
1896	68.1	−0.7	96	37	5.46	+1.75	13.45	2.64	0	10	12	10	8
1897	66.1	−2.7	95	35	3.38	−0.33	5.50	2.12	0	10	10	13	7
1898	70.1	+1.3	100	38	2.10	−1.61	3.54	1.13	0	8	14	12	4
1899	72.3	+3.5	103	38	2.50	−1.21	4.34	1.01	0	7	15	10	5
1900	70.4	+1.6	97	39	3.08	−0.63	4.91	1.10	0	8	12	12	6
1901	70.0	+1.2	103	35	**1.57**	−2.14	4.36	0.73	0	5	18	8	4
1902	67.5	−1.3	99	37	6.57	+2.86	10.21	4.54	0	11	14	11	5
1903	**64.0**	−4.8	92	37	**7.68**	+3.97	**15.02**	2.39	0	15	6	10	14
1904	68.6	−0.2	100	34	3.13	−0.58	5.44	1.91	0	12	13	10	7
1905	68.3	−0.5	96	35	3.43	−0.28	8.71	1.67	0	10	11	12	7
1906	70.4	+1.6	98	38	4.48	+0.77	9.18	1.45	0	12	11	11	8
1907	64.7	−4.1	96	31	4.41	+0.70	6.85	3.15	0	10	12	10	8
1908	69.9	+1.1	99	35	2.32	−1.39	4.63	0.77	0	4	16	12	2
1909	70.0	+1.2	99	36	3.26	−0.45	5.70	1.71	0	12	9	10	11
1910	66.9	−1.9	95	34	5.17	+1.46	8.01	2.66	0	13	9	10	11
1911	68.9	+0.1	97	40	5.36	+1.65	10.11	2.84	0	14	9	12	9
1912	68.0	−0.8	98	33	1.94	−1.77	3.61	0.91	0	8	9	12	9
1913	69.1	+0.3	98	31	1.80	−1.91	3.76	0.68	0	5	19	8	3
1914	68.5	−0.3	98	35	2.66	−1.05	4.85	1.09	0	7	16	9	6
1915	67.0	−1.8	95	37	3.12	−0.59	6.51	1.40	0	11	13	10	7
1916	64.7	−4.1	87	36	4.20	+0.49	5.99	2.22	0	13	10	9	11
1917	68.9	+0.1	95	40	4.27	+0.56	7.14	2.80	0	12	13	10	7
1918	66.3	−2.5	96	32	3.43	−0.28	6.21	1.35	0	8	15	9	6
1919	69.5	+0.7	99	38	3.16	−0.55	3.58	**0.37**	0	8	16	7	7
1920	68.4	−0.4	98	38	6.18	+2.47	11.26	3.12	0	12	13	9	8
1921	70.4	+1.6	100	33	3.23	−0.48	5.64	1.40	0	8	18	7	5
1922	71 1	+2.3	95	39	6.31	+2.60	11.50	2.97	0	15	12	9	9
1923	72.5	+3.7	**106**	37	2.08	−1.63	5.41	0.72	0	7	18	8	4
1924	66.8	−2 0	95	**30**	4.20	+0.49	7.32	1.72	0	13	11	11	8
1925	**73.6**	+4 8	103	36	3.10	−0.61	6.16	0.72	0	9	17	9	4
1926	64.9	−3.9	97	31	2.60	−1.11	4.73	1.29	0	11	12	9	9
1927	65.4	−3.4	97	31	3.16	−0.55	5.24	1.46	0	10	15	9	6
1928	66.6	−2.2	93	36	6.75	+3.04	10.34	3.03	0	15	10	9	11
1929	69.5	+0.7	98	33	3.11	−0.60	5.41	1.41	0	9	15	9	6
1930	70.8	+2.0	98	**30**	4.17	+0.46	6.48	2.46	0	8	16	8	6
1931	69.3	+0.5	101	40	4.84	+1.13	7.42	2.18	0	10	16	7	7
1932	69.3	+0.5	98	**30**	3.68	−0.03	6.59	1.83	0	10	13	8	9
1933	71.0	+2.2	105	32	2.79	−0.92	5.71	0.52	0	9	17	8	5
Period	68.8	....	106	30	3.71	....	15.02	0.87	0	10	13	10	7

W. B. O. Philadelphia-7-24-33-875.

Climatological Data for June, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	73.0^{c}	+4.2	102	9	38	15	41	1.82	−2.18	0.83	0	8	25	2	3	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	69.5	+4.7	96	9	38	2†	41	2.83	−1.29	1.80	0	8	22	6	2	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	43	2	....	1.95	−2.66	0.61	0	7	26	2	2	s.	Brice E. Riker.
Dover	Morris	600	49	69.5	+2.8	95	9	41	15	39	2.22	−1.81	0.70	0	11	7	16	7	......	William C. Harris
Laytou	Sussex	480	32	69.2	+3.7	98	9†	32	2	48	2.26	−1.53	1.48	0	7	16	5	9	w.	A. M. Depue.
Long Valley	Morris	520	3	69.4	....	97	9	39	2	43	1.14	....	0.53	0	6	27	1	2	w.	S. N .Dilts.
Newton	Sussex	769	50	70.8	+2.2	97	9	39	15	39	2.26	−1.72	0.70	0	5	18	9	3	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	68.8	−0.5	95	29	42	15	36	3.69	+0.06	1.06	0	10	19	4	7	......	Town Engineer.
Sussex	Sussex	442	38	70.4^{b}	+3.6	98	9	39	2	45	4.58	+0.90	1.21	0	8	13	8	9	......	A. J. W. Mowatt
Means and extremes	......	......	....	70.1	+3.0	102	9	32	2	48	2.53	−1.28	1.80	0	8	19	6	5	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	69.7	+2.1	92	8†	39	2	45	2.95	−0.72	0.74	......	11	17	0	13	ne.	John Kline.
Canoe Brook	Essex	173	3	68.2	....	97	9	36	2†	44	3.40	....	0.64	......	9	19	5	6	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	....	......	......	......	......	....	4.16	+0.10	0.74	......	11	22	5	3	......	Paul Molitor. Sr.
Elizabeth	Union	45	54	72.2	+1.7	105	10	44	2†	41	2.58	−1.04	1.11	0	11	23	3	4	sw.	Union County Park Comm.
Flemington	Hunterdon	140	§47	72.4	+3.2	99	9	42	15	40	2.00	−1.84	0.56	0	10	23	5	2	nw.	Hiram E. Deats.
Jersey City	Hudson	10	35	71.6	+0.7	98	9	47	15	32	2.35	−1.15	0.63	0	11	9	15	6	n.	S. K. Pearson.
Lambertville	Hunterdon	430	46	70.5	+0.8	95	9	41	15	37	2.98	−0.93	0.73	0	8	21	4	5	w	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	71.4	+3.4	99	9	42	2†	42	3.03	−0.49	0.76	0	11	20	6	4	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	71.0	+1.9	96	9	42	15	38	2.85	−0.91	0.86	0	11	18	10	2	sw.	N. J. Experiment Station.
New Milford‡‡	Bergen	40	15	......	....	......	......	......	......	....	4.24	....	0.92	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	72.1	+2.3	99	9	45	2†	39	2.62	−1.50	0.58	0	12	16	11	3	sw.	William H. Meyer.
Plainfield	Union	120	45	70.8	+2.2	98	9	43	15	41	4.93	+1.19	1.69	0	12	6	17	7	sw.	S. K .Pearson.
Ridgefield	Bergen	80	16	70.6	....	97	9	43	15	36	3.20	....	0.91	0	11	14	11	5	sw.	George P. Kirsten.
Somerville, (near)	Somerset	70	50	70.7	+1.6	98	9	39	15	40	2.66	−1.08	0.57	0	11	17	6	7	nw.	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	15	......	....	......	......	......	......	....	4.75	....	1.03	......	9	....	..	....	......	Hackensack Water Co.
New York, N. Y	......	365	63	70.8	+2.0	96	9	47	15	29	2.55	−0.78	0.74	0	10	7	14	9	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	70.9	+2.0	105	10	36	2†	45	3.25	−0.76	1.69	0	10	17	8	5	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	70.6^{h}	+1.9	95	22	39	15	41	0.52	−2.70	0.39	......	7	16	7	7	s.	A. F. Waldron.
Bridgeton	Cumberland	30	50	73.1	+1.0	95	9†	44	15	38	2.80	−0.93	1.16	0	5	21	7	2	sw.	Bennett K. Matlack
Burlington	Burlington	12	§47	74.0	+4.3	99	9	40	15	38	4.20	+0.32	1.80	0	5	24	3	3	nw.	Public Service Power Co.
Camden	Camden	20	1	74.0	....	102	9	48	15	38	3.72	....	1.40	0	10	13	14	3	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	71.8	....	99	9	41	15	42	2.48	−1.15	0.93	0	9	23	3	4	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	......	....	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	71.0^{a}	+2.0	100	9	40	15	40	2.64	−0.96	0.74	0	8	24	3	3	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	71.8	+2.0	100	9	41	15	46	5.30	+1.17	3.10	0	7	14	14	2	sw.	James M. Armstrong.
Lakewood	Ocean	54	29	71.6	+4.1	97	9	43	15	44	1.02	−2.69	0.10	0	10	20	5	5	w.	R. W. Holman.
Moorestown	Burlington	62	70	71.7	+1.7	96	9	45	15	38	2.95	−0.77	1.01	0	9	10	16	4	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	....	......	......	......	......	....	0.68	−2.99	0.28	0	5	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	72.8	....	99	9	43	15	40	1.72	....	0.87	0	6	18	6	6	se.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	70.0	....	93	9†	42	15	34	0.79	−3.14	0.30	......	5	19	6	5	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	....	......	......	......	......	....	2.14	....	1.10	0	5	20	5	5	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	71.2	....	100	9	37	15	47	5.71	....	1.96	......	11	19	9	2	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	72.0	+2.5	99	9	45	15	35	2.93	−0.16	1.45	0	11	10	15	5	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	....	......	......	......	......	....	4.04	....	2.19	0	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	70.0	+1.6	92	9	40	14	34	0.75	−3.08	0.38	0	3	16	6	8	nw.	John H. Brown.
Philadelphia, Pa	......	114	62	74.4	+3.0	98	9	50	15	32	4.78	+1.54	1.49	0	10	11	13	6	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	71.8	+2.3	102	9	37	15	47	2.61	−1.42	3.10	0	7	18	8	4	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	69.3	+1.9	92	12	46	15	26	0.97	−2.65	0.32	0	11	15	10	5	se.	Information Bureau.
Atlantic City	Atlantic	16	60	69.8	+3.2	91	22	47	15	27	1.84	−1.20	1.12	0	6	13	9	8	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	70.2	+4.0	95	9†	44	15	34	2.49	−1.31	1.80	0	10	13	11	6	nw.	William D. Martin.
Sandy Hook	Monmouth	22	35	69.7	+1.9	91	9	51	15	28	4.59	+0.81	2.99	0	12	13	12	5	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	69.8	+2.8	95	9†	44	15	34	2.47	−1.09	2.99	0	10	14	10	6	s.	
For the State	......	......	....	71.0	+2.2	105	10	32	2	48	2.79	−0.92	3.10	0	9	17	8	5	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for June, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware				.15		.10	.08			.50		.05	.01									.10				T.				.83		1.82
Charlotteburg	Passaic					.85	.95	.21	.01		.16			.39									.16				.10						2.83
Culvers Lake	Delaware			.14		.35	.61	.05			.30		.27									T.									.23		1.95
Dover	Passaic			.11		.22	.70	.22			.38		*	.31				.03					.01				.01				.23		2.22
Layton	Delaware			.02		1.48	.42				.10		.14				.02											T.			.08		2.26
Long Valley	Morris					.20	.53	.08			.10		.03	.20																			1.14
Newton	Delaware			.35	T.	.38	.70	T.			.34		.49		T.		T.	T	T.		T.		T.								T.		2.26
Phillipsburg	...do			.74		.12		.69	.05		.29		.44	.17	T.		T.	.09			T.		.04				T				1.06		3.69
Sussex	Hudson			.04		1.16	1.08	1.21	.61		.35		.08					.05															4.58
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic	.57			.34	.18	.74	.04	.29		.20			.28					.07				.01					.23	T.				2.95
Canoe Brook ‖‖	Essex	.38			.44	.20	.58		.28		.36			.64					.39								.13	T.					3.40
Chatham ‖	....do	.36			.39	.44	.61	.32	.17		.28			.74				T	.47									.31	.07		T.		4.16
Elizabeth	Coast	.02			.08	.30	1.11	.25			.28		.07	.27				.12			T.						.05	.03					2.58
Flemington	Raritan				.29		.56	.17	.02		.17		T.	.45			.08	.16									.09	.01					2.00
Jersey City	Coast			.38		.12	.63	.41			.08		.02	.14			T.	.33					T.				.02	.02			.20		2.35
Lambertville	Delaware				.41	.49	.39	.16			.73						.54									.19	.07						2.98
Little Falls. ‖‖	Passaic	.13			.45	.21	.76	.01	.16		.40			.30					.51				.01					.09					3.03
New Brunswick	Raritan	.02			.24	.14	.86	T.	.48		.13			.33			.06	.25									.23	.11					2.85
New Milford ‖‖	Hackensack	.67			.80	.36	.67		.09		.42			.92					.28									.03					4.24
Paterson	Passaic	.07		.12	.06	.45	.56	.06			.58		.04	.27				.28					.01				.12	T.					2.62
Plainfield	Raritan			.49		.47	1.26	.33			.65		.06	.31	T.		.01	.23					.02				.15	T.			.95		4.93
Ridgefield**	Hackensack			.14		.38	.91	.20			.24		.35	.34	.01		T.	.36					T.				.05				.22		3.20
Somerville	Raritan			.35	.01	.09	.57	.15			.56			.37			.04	.01									.49	.02					2.66
Woodcliff Lake ‖‖	Hackensack	1.03		.49	.56	.98	.07	.17		.22			.97					.26															4.75
New York, N. Y***	Coast			.37	T.	.74	.03	.35			.08		.30	.13			T.	.29					T.				.04	T.			.22		2.55
The Southern Interior.																																	
Belleplain	Tuckahoe	.02						*	.06								.02	.37									.02	.03					0.52
Bridgeton	Delaware						.12		1.05					T.				.44									.03	1.16					2.80
urlington	Delaware			.98			.05		.45					.92			T.											1.80					4.20
amden***	.. .do			.22		.09		.09	.13				.32	.12			T	.06			T.						1.40	.27			1.02		3.72
reehold	Raritan				.13	.39	.93		.18	.03				.61				.15									.02	.04					2.48
Iammonton	Mullica																																......
Iightstown	Raritan				.18	.54	.56		.11		.24			.74				.22										.05					2.64
ndian Mills	Mullica				.88		.08	.72						.15	T		T.	.19									3.10	.18					5.30
akewood	Metedeconk	.10			.16	.20		.10	T.		.08			.08			.02	.14									.06	.08					1.02
Ioorestown ‖‖	Delaware	.41			.39		.04		.36					.61				T.	.06								T.	1.01	.06	.01			2.95
Iorthfield	Coast	.03			.06				.27									.28										.04					0.68
emberton	Delaware				.87				.24	T.				.12		T.	T.	.12									.11	.26					1.72
leasantville ‖‖	Coast	.22			.06				.30						T.			T.	.15									.06					0.79
ort Norris	Maurice	.07							.42					.05				.50										1.10	T.				2.14
unyon	Coast	.73			.16	.27	1.96		.19		.66			.82			.06	.58									.21	.07					5.71
renton***	Delaware			.32		.03	.01	.13	.03				1.43	.02	T		.02	T.									.17	.17			.60		2.93
renton No. 2 ‖‖	...do	.36			.39	.01	.16		.21		T.			2.19	T.			.07	T.								.45	.16	.10				4.04
uckerton	Coast				.35				.38					.02																			0.75
hila., Pa***	Delaware			.08		.02		.18	.10				1.37	T.			.01	.06									.92	.55			1.49		4.78
The Sea Coast.																																	
sbury Park	Coast	.07		.11		.32	.03	.09			.07		T.	.02	T.		.01	.05							T.	T.	.08	T.			.12		0.97
tlantic City***	....do	T.		.15	.03		T.	.36	.05					T.			T	.21									T.	T	T.		1.04		1.84
ong Branch**	....do			.20		.40	1.40	.03			.05		T.	.14			.03	.07									.08	T.			.09		2.49
andy Hook***	....do	T.		.16	T.	2.86	.31	.01			.46		.31	.04			.01	.05			T.		.02				.14	T.			.22		4.59

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipi-
tion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following
easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
tlantic City	29.94	30.19	15	29.72	12	13.7	38	se.	7	74	66	78	72
amden	29.95	30.24	15	29.69	3	8.5	35	ne.	3	69	48	61	......
ong Branch	29.93	30.13	15	29.63	3	......	......	......	......	71	60	67	64
ew York, N. Y	29.92	30.15	15	29.65	3	13.0	67	nw.	10	75	60	67	71
hiladelphia, Pa	29.95	30.22	15	29.70	3	11.8	36	nw.	7	68	48	57	65
dgefield	29.92	30.14	15	29.65	3	......	......	......	......	......	......	......	......
andy Hook	29.93	30.17	15	29.65	3	11.7	50	sw.	5	76	65	78	68
renton	29.93	30.20	15	29.68	3	8.8	32	nw.	7	72	51	64	75

Daily Temperatures for June, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	74	....	....	91	87	89	93	97	102	91	93	95	79	65	75	73	79	68	87	81	95	90	89	89	91	83	90	92	98	92	....	86.7ᵇ
	Minimum	53	42	....	....	....	64	62	64	67	66	60	69	60	43	38	56	57	48	54	61	54	66	54	57	62	68	69	67	70	72	....	59.3ᶜ
Charlotteburg	Maximum	71	74	88	92	83	83	86	90	96	94	90	90	83	66	66	71	79	80	78	79	86	86	83	86	90	84	79	86	93	93	....	83.5
	Minimum	50	38	60	59	56	59	54	63	59	63	65	65	55	43	38	44	45	43	54	56	49	67	54	53	49	65	67	63	62	66	....	55.5
Dover	Maximum	68	78	87	83	84	86	86	93	95	85	85	88	76	65	69	68	73	72	81	73	88	85	85	82	84	74	76	85	93	84	....	81.0
	Minimum	52	42	48	60	61	62	60	66	64	64	60	70	55	44	41	49	56	47	54	58	52	68	57	54	58	66	67	67	68	70	....	58.0
Layton	Maximum	72	78	91	84	83	88	87	94	98	87	88	91	72	64	71	71	78	75	82	78	92	84	85	85	88	87	87	93	98	89	....	84.0
	Minimum	50	32	43	58	58	60	56	60	61	63	53	69	53	38	34	48	61	40	51	55	50	64	47	48	57	68	69	65	65	67	....	54.4
Long Valley	Maximum	70	77	87	83	85	81	87	92	97	85	89	90	83	83	73	74	76	73	81	78	91	90	86	82	84	77	81	89	94	86	....	83.6
	Minimum	52	39	44	53	58	62	56	63	62	64	57	65	58	44	41	43	45	45	53	57	49	51	57	51	61	66	67	65	66	64	...	55.3
Newton	Maximum	69	80	86	82	84	83	86	92	97	95	89	91	70	66	70	70	79	73	81	77	90	87	87	85	89	91	94	92	94	90	....	84.0
	Minimum	50	41	48	58	58	61	59	65	67	64	56	67	56	43	39	50	53	49	54	56	52	68	58	64	54	64	68	70	68	64	....	57.5
Phillipsburg	Maximum	64	62	85	68	78	87	89	87	91	91	92	78	73	56	55	60	68	64	86	78	83	83	75	79	87	79	85	76	95	90	....	78.1
	Minimum	55	44	49	60	62	66	60	65	67	68	61	67	55	47	42	52	56	50	55	60	55	67	54	58	62	68	70	68	70	71	....	59.5
Sussex	Maximum	72	84	84	88	87	87	86	91	98	85	86	86	68	....	68	68	75	72	77	77	....	85	87	85	87	87	87	94	93	90	....	83.4ᵇ
	Minimum	52	39	49	60	58	62	58	62	64	66	57	68	58	....	40	52	54	48	56	49	....	54	53	54	61	68	70	57	69	71	....	57.5ᵇ
The Red Sandstone Plain.																																	
Boonton§§	Maximum	72	77	90	84	84	86	88	92	91	87	81	90	79	66	69	70	77	75	82	77	87	86	85	82	84	77	80	87	92	86	....	82.1
	Minimum	54	39	45	54	59	62	66	66	63	65	67	65	59	47	42	49	54	51	58	58	50	59	55	53	55	64	67	66	66	69	....	57.3
Canoe Brook§§	Maximum	70	75	87	84	85	87	89	94	97	86	85	91	69	67	71	71	73	74	82	73	87	85	84	80	83	76	79	85	93	87	....	81.6
	Minimum	54	36	43	56	59	61	56	62	62	67	54	65	58	42	36	46	54	41	48	57	49	62	48	51	53	66	66	63	63	67	....	54.8
Elizabeth	Maximum	70	74	90	87	87	89	91	95	101	105	92	95	77	66	72	74	75	77	84	83	90	88	88	81	84	74	81	86	101	90	....	84.9
	Minimum	57	44	49	62	62	63	63	65	69	70	61	68	58	47	44	51	57	51	57	61	54	68	57	57	59	67	69	69	60	70	....	59.6
Flemington	Maximum	69	79	89	89	89	90	90	98	99	93	92	92	80	64	76	70	77	77	86	79	92	89	90	88	91	84	83	90	95	90	....	85.7
	Minimum	55	44	49	61	61	63	61	65	66	68	61	69	60	45	42	50	55	48	55	62	53	68	65	57	59	68	68	69	69	69	....	59.2
Jersey City	Maximum	69	72	86	85	86	86	90	93	98	88	84	91	71	66	70	70	75	74	82	74	80	86	85	80	84	75	80	85	92	86	....	81.4
	Minimum	55	51	54	63	62	64	64	66	76	70	69	64	54	50	47	65	54	53	58	59	60	70	65	65	64	65	67	69	70	69	....	61.7
Lambertville	Maximum	70	74	85	84	85	85	87	90	94	85	89	90	75	65	69	68	70	76	82	75	90	86	85	86	76	81	85	91	89	87	....	81.8
	Minimum	53	46	52	60	60	63	64	64	72	62	62	70	53	44	41	50	50	48	55	62	53	70	56	60	62	68	68	69	70	70	....	59.2
Little Falls§§	Maximum	70	80	89	88	87	88	90	97	99	88	87	92	72	66	73	72	76	77	85	78	89	88	90	82	88	76	84	88	98	89	....	84.2
	Minimum	56	42	47	59	61	63	60	64	63	66	59	66	58	46	42	50	57	51	58	59	53	65	55	55	67	66	68	68	66	69	....	58.6
New Brunswick	Maximum	67	75	87	85	86	84	88	89	96	94	85	91	80	66	69	72	74	74	82	80	90	89	85	83	82	78	77	86	90	88	....	82.4
	Minimum	57	48	49	61	61	64	63	65	69	69	61	69	60	45	42	50	55	48	56	61	55	70	57	57	59	67	67	67	69	69	....	59.7
Paterson	Maximum	69	78	89	86	86	87	89	95	99	93	85	92	78	67	73	70	72	76	84	78	88	89	88	82	86	77	81	87	96	87	....	83.6
	Minimum	56	45	50	63	63	63	64	64	69	68	63	70	60	48	45	53	57	51	58	60	56	69	59	59	60	68	68	70	70	70	....	60.6
Plainfield	Maximum	73	76	88	85	86	87	90	93	98	88	87	91	77	67	73	70	76	75	84	74	90	87	86	86	85	75	80	86	93	89	....	83.2
	Minimum	56	46	47	60	60	63	61	65	66	67	69	68	58	46	43	51	54	46	53	56	53	67	57	54	57	66	67	68	69	67	....	58.3
Ridgefield	Maximum	67	75	87	84	86	87	89	93	97	85	84	91	71	67	70	68	73	74	82	75	82	84	83	76	80	74	78	86	92	86	....	80.9
	Minimum	56	45	51	62	62	63	63	66	69	68	62	70	59	47	43	51	56	49	55	59	57	67	63	63	64	64	66	67	69	69	....	60.2
Somerville	Maximum	72	77	87	85	87	87	89	91	98	88	89	92	75	67	71	70	77	75	82	75	91	88	86	86	88	76	88	88	95	89	....	83.6
	Minimum	54	43	47	59	60	63	60	65	66	67	59	67	54	43	39	49	53	46	53	60	52	65	53	56	57	68	68	69	68	70	....	57.8
New York, N. Y.	Maximum	66	69	84	82	85	83	89	92	96	86	80	90	68	65	68	68	74	73	80	73	79	84	83	76	80	74	78	82	88	84	....	79.3
	Minimum	55	51	55	63	63	64	65	66	77	70	71	64	54	50	47	55	54	54	59	60	60	71	67	66	65	66	67	69	70	69	....	62.2
The Southern Interior.																																	
Belleplain	Maximum	66	70	84	85	88	87	90	84	94	85	90	93	....	73	68	75	78	75	83	....	88	95	85	83	87	86	84	82	86	90	....	83.5ᵇ
	Minimum	55	49	43	59	62	64	63	64	64	69	58	69	....	43	39	46	60	46	49	....	53	65	55	51	56	62	68	68	68	69	....	57.8ᵇ
Bridgeton	Maximum	68	75	88	87	90	89	93	90	95	85	92	94	87	64	70	73	80	77	85	87	90	95	91	84	89	89	87	85	88	88	....	85.2
	Minimum	55	50	50	64	64	65	65	64	70	70	65	69	60	46	44	49	59	51	53	65	59	68	63	58	61	68	68	68	69	70	....	61.0
Burlington	Maximum	77	77	86	85	90	90	97	96	99	98	95	94	93	71	69	71	78	82	83	84	94	93	88	87	89	90	84	87	91	90	....	86.9
	Minimum	57	49	53	61	60	68	63	67	77	74	73	63	62	49	40	50	52	54	53	65	56	68	60	58	64	60	70	69	70	71	....	61.2
Camden	Maximum	70	75	91	85	90	88	94	93	102	90	95	97	70	63	70	70	78	79	85	80	94	93	88	88	92	85	82	86	91	90	....	85.1
	Minimum	57	52	53	66	64	68	66	67	74	71	67	71	56	51	48	54	60	54	61	62	58	71	65	58	62	70	70	69	71	70	....	62.9
Freehold	Maximum	66	71	89	84	89	89	90	91	99	94	93	95	89	64	70	71	76	74	83	83	88	88	86	84	84	80	81	85	91	91	....	83.9
	Minimum	57	45	47	60	61	64	65	64	63	74	72	75	57	44	41	48	57	54	54	60	54	70	56	56	59	67	67	67	67	68	....	59.8
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	66	76	88	84	87	87	90	90	100	94	....	93	80	68	69	68	77	75	83	75	92	91	92	88	94	89	85	93	94	92	....	84.8ᵃ
	Minimum	57	45	48	61	61	64	63	65	71	67	....	67	57	43	40	49	57	48	54	60	52	68	58	53	56	56	55	56	58	68	....	57.1ᵃ
Indian Mills	Maximum	67	74	91	82	90	86	93	90	100	89	93	97	86	65	68	75	79	76	83	77	95	92	88	85	92	80	80	86	91	90	....	84.7
	Minimum	57	49	45	60	61	66	65	65	70	68	58	68	60	43	41	44	59	45	50	63	53	65	54	53	56	68	69	69	69	70	....	58.8
Lakewood	Maximum	69	71	89	87	88	86	90	92	97	87	85	96	89	68	71	71	78	76	85	83	91	92	87	81	83	84	81	85	92	92	....	84.3
	Minimum	58	47	45	61	61	64	64	65	71	67	58	67	59	44	43	49	58	49	53	62	53	68	59	52	55	68	68	68	66	67	....	59.0
Moorestown	Maximum	70	73	88	82	87	86	90	90	96	87	91	94	69	64	68	69	79	76	83	79	91	91	86	84	88	84	83	85	88	87	....	82.9
	Minimum	56	49	50	63	62	66	64	67	72	69	64	66	52	49	45	50	57	51	59	59	56	66	59	57	59	68	70	69	70	70	....	60.5
Pemberton	Maximum	69	76	88	85	88	86	91	91	99	97	93	94	90	70	70	70	80	78	84	80	94	93	88	84	91	81	82	87	89	90	....	85.3
	Minimum	58	49	48	62	63	67	63	67	69	70	62	68	62	47	43	48	59	49	55	65	54	68	56	55	59	68	69	70	69	69	....	60.4
Pleasantville§§	Maximum	65	69	75	81	89	87	88	87	93	88	82	93	79	64	68	75	80	77	84	79	74	92	81	78	80	79	81	81	82	82	....	80.4
	Minimum	58	50	47	59	63	66	64	64	68	69	62	68	63	46	42	52	61	47	50	63	56	65	57	54	60	67	63	68	68	70	....	59.7
Runyon	Maximum	74	84	86	89	89	90	92	95	100	94	89	92	84	74	74	71	76	78	87	86	92	91	88	89	86	84	81	89	93	91	....	86.3
	Minimum	57	56	44	42	60	63	56	58	63	72	54	64	62	41	37	44	52	43	51	60	50	67	52	47	51	61	67	72	67	67	....	56.0
Trenton	Maximum	70	74	87	83	88	86	91	91	99	86	91	94	68	64	69	68	77	75	82	73	91	89	86	83	88	79	82	87	91	87	....	82.6
	Minimum	55	51	52	63	64	66	66	66	74	70	68	64	53	48	45	52	58	53	57	61	58	70	63	61	63	68	68	68	70	68	....	61.4
Tuckerton	Maximum	69	70	70	75	75	80	88	87	92	88	85	90	82	74	71	70	78	78	78	78	70	90	86	80	82	75	75	80	80	88	....	79.3
	Minimum	50	49	50	55	50	62	70	60	70	70	70	75	60	40	52	58	49	57	61	59	60	65	62	70	71	61	60	70	69	62	....	60.6
Philadelphia, Pa.	Maximum	71	75	89	84	87	87	90	92	98	88	92	94	70	64	69	69	81	77	84	82	90	90	87	84	89	83	85	84	88	88	....	83.7
	Minimum	58	55	57	66	68	69	69	68	78	75	74	68	58	52	50	58	60	56	63	63	61	74	67	65	66	71	71	71	72	69	....	65.1
The Sea Coast.																																	
Asbury Park	Maximum	67	67	75	77	71	77	80	85	85	84	78	92	78	68	68	72	76	76	83	71	71	89	79	74	71	74	74	75	80	76	....	76.4
	Minimum	62	58	53	67	64	64	65	67	74	66	68	68	61	48	46	54	60	52	57	63	61	65	64	61	65	61	67	68	69	68	....	62.2
Atlantic City	Maximum	65	63	69	79	83	87	80	80	87	83	81	85	75	64	66	70	79	78	85	72	73	91	77	75	75	75	74	78	77	78	....	76.8
	Minimum	59	53	55	63	64	66	66	67	71	69	69	71	55	50	47	59	61	54	58	64	63	68	64	66	66	66	69	68	68	68	....	62.9
Long Branch	Maximum	65	66	82	82	83	83	85	94	95	90	78	95	75	70	73	73	77	76	85	70	80	90	82	78	74	77	75	80	86	85	....	80.1
	Minimum	58	53	48	63	61	63	63	66	71	68	65	70	58	46	44	51	58	50	56	61	55	68	60	56	60	67	67	67	69	69	....	60.4
Sandy Hook	Maximum	64	64	81	81	80	80	86	87	91	84	75	89	69	65	68	70	74	73	80	67	77	84	81	74	72	72	72	78	86	83	....	76.9
	Minimum	58	55	53	63	62	64	66	67	71	67	68	61	56	52	61	57	61	57	61	60	61	68	65	64	63	66	67	67	70	69	....	62.3

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Canoe Brook	Evaporation	.128	.216	.192	.208	.172	.208	.200	.224	.264	.216	.248	.224	.248	.152	.176	.080	.134	.224	.240	.200	.208	.256	.216	.232	.170	.056	.024	.144	.224	.188	....	5.672
	Wind movement	13	14	19	16	12	15	8	14	8	21	9	26	19	31	22	15	21	20	41	22	26	15	19	9	27	25	18	8	21	18	....	552
Pleasantville**	Evaporation	.144	.240	.204	.320	.288	.320	.268	.240	.320	.224	.304	.320	.224	.128	.288	.160	.310	.288	.304	.272	.304	.288	.336	.288	.288	.108	.128	.160	.240	.374	....	7.680
	Wind movement	62	73	64	46	69	61	59	60	31	59	78	29	51	72	44	60	77	51	73	40	72	53	30	50	68	42	38	38	44	48	....	1642
Runyon	Evaporation	.030	.135	.120	.010	.070	.060	.180	.090	.210	.060	.200	.200	.060	.120	.150	.060	.220	.150	.240	.240	.240	.240	.240	.230	.230	.080	.038	.180	.210	.230	....	4.523
	Wind movement	41	14	16	19	44	16	12	8	16	20	15	21	13	11	16	20	29	35	16	40	18	18	16	22	16	14	12	21	22	31	....	615

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

1.05
NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXVIII. JULY, 1933. No. 7.

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GENERAL SUMMARY.

The temperature during the month alternated moderately above and below the normal in periods of varying lengths from a few days to a week in length, with the final average for the month practically normal. The most marked departures occurred on the 3d and 31st, the lowest temperatures for the month being recorded on the 3d and 4th and the highest almost exclusively on the 31st. The monthly range was mostly from the high forties and low fifties to around the 100-degree mark. Relatively cool periods came during the 2d to 5th, inc., 11th to 17th, and 26th to 28th, while the warm spells prevailed during the 7th to 9th, 19th to 24th, and 29th to 31st. Most of the stations in the northern half of the State experienced temperatures of 100 degrees, or over, on the 31st.

The rainfall for the month, for the State as a whole, was 78% of the normal amount. However, individual station amounts were quite variant, showing the local effect of thunderstorms. Along the sea coast only about one-half of the normal amount fell, while in the Southern Interior the average was 93% of normal; in the Red Sandstone Plain and Highlands the average was 65%. The periods during which rain occurred were mainly the 1st to 5th, inc., 9th, 16-17th, 25-26th, and on the 27th in the southern half of the State. The bulk of the rain came during the 1st to 3d, inc., and the 16-17th. Between three and four inches fell during the 2d at Paterson, Little Falls and New Milford, all rather close together.

No damage by high winds was reported, but lightning ignited three oil tanks near Elizabeth on the night of the 1st, destroying 300,000 gallons of oil.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 73.4°, which was 0.3° below normal. The highest temperature was 105° at Newton on the 31st, and the lowest, 41°, at Long Valley on the 4th. The greatest daily range of temperature was 40° at Layton on the 19th. The highest monthly mean temperature was 75.4° at Burlington, and the lowest, 71.0° at Long Valley.

The temperature departure from the normal for the year, 1933, to date, by sections, is: The Highlands, +2.8°; Red Sandstone Plain, +1.1°; Southern Interior, +2.5°; Sea Coast, +3.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 3.73 inches, which was 1.06 inches below normal. The greatest monthly precipitation was 6.05 inches at Bridgeton, and the least, 1.20 inches at Newton. The greatest amount of precipitation in any 24 consecutive hours was 3.66 inches at Little Falls on the 2d. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands, —1.78 inches; Red Sandstone Plain, —0.09 inch; Southern Interior, +0.69 inch; Sea Coast, —1.57 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 50 miles per hour from the northeast at Sandy Hook on the 1st and from the northwest at Atlantic City on the 3d.

MISCELLANEOUS.

The per cent of possible sunshine was 64, or 1 per cent above nomal.

The mean atmospheric pressure, reduced to sea level, was 30.01 inches, or 0.03 inch above the normal. The highest reading was 30.35 inches at Camden on the 4th, and the lowest 29.61 at Ridgefield on the 1st.

The mean stage of the Delaware River at Phillipsburg was 1.0 foot, and the highest 2.5 feet on the 6th. At Trenton the mean was 0.5 foot and the highest 1.7 on the 4th.

Thunderstorms occurred on the following dates: 1, 2, 3, 4, 9, 16, 17, 19, 20, 22, 25, 26 and 31. Dense fog was observed quite generally over the State on the 10th. It was general in the southern interior of the State on the 11th, and occurred at scattered places on the 12th, 20th and 21st.

OBITUARY.

The passing of Mr. Julius Gerlich, Cooperative Observer at Somerville, is announced with regret and sorrow. Mr. Gerlich was most faithful and efficient in the fulfillment of his voluntarily-assumed duties in the public interest.

COMPARATIVE DATA FOR JULY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885........	75.2	+1.5	100	44	3.50	−1.29	7.28	1.29	0	....	....	....	....
1886........	73.0	−0.7	98	48	4.91	+0.12	7.95	2.98	0	....	....	....	....
1887........	77.1	+3.4	102	54	7.67	+2.88	15.29	1.95	0	11	....	...	....
1888........	71.1	−2.6	95	45	3.50	−1.29	7.03	1.25	0	9	....	....	....
1889........	73.4	−0.3	95	48	10.19	+5.40	18.58	4.66	0	14	....	....	....
1890........	72.5	−1.2	101	39	5.62	+0.83	7.55	3.60	0	9	12	11	8
1891........	**70.1**	−3.6	95	43	5.30	+0.51	9.41	3.03	0	12	10	11	10
1892........	74.3	+0.6	105	44	4.03	−0.76	7.96	2.38	0	8	12	14	5
1893........	73.9	+0.2	102	40	2.72	−2.07	4.63	1.26	0	8	14	13	4
1894........	75.7	+2.0	106	44	1.66	−3.13	5.00	**0.15**	0	6	14	12	5
1895........	70.9	−2.8	99	41	4.26	−0.53	7.73	1.53	0	10	12	12	7
1896........	75.0	+1.3	98	47	5.50	+0.71	13.29	2.45	0	13	13	10	8
1897........	74.1	+0.4	102	50	**11.42**	+6.63	**20.80**	6.11	0	15	10	11	10
1898........	75.3	+1.6	**107**	38	4.96	+0.17	11.72	2.23	0	10	11	13	7
1899........	74.7	+1.0	98	38	5.75	+0.96	9.02	3.34	0	11	13	11	7
1900........	75.9	+2.2	104	42	4.74	−0.05	7.21	1.11	0	11	15	12	4
1901........	**77.3**	+3.6	**107**	45	5.87	+1.08	10.92	1.89	0	14	9	13	9
1902........	73.0	−0.7	100	43	4.78	−0.01	9.92	1.83	0	13	10	12	9
1903........	73.3	−0.4	100	38	5.51	+0.72	10.14	3.08	0	12	16	10	5
1904........	72.3	−1.4	98	42	4.87	+0.08	8.06	2.41	0	13	13	10	8
1905........	74.4	+0.7	102	42	4.06	−0.73	8.19	1.67	0	12	12	13	6
1906........	72.8	−0.9	94	46	5.58	+0.79	13.25	3.44	0	12	11	14	6
1907........	73.6	−0.1	96	40	2.62	−2.17	6.42	0.95	0	8	8	12	11
1908........	75.6	+1.9	106	42	4.70	−0.09	8.12	1.97	0	9	12	13	6
1909	71.6	−2.1	99	36	2.12	−2.67	4.03	1.03	0	5	14	14	3
1910..	75.3	+1.6	99	42	**1.36**	−3.43	5.33	0.22	0	5	12	12	7
1911........	76.0	+2.3	104	42	3.64	−1.15	6.46	2.06	0	8	12	12	7
1912........	73.7	0.0	100	36	3.86	−0.93	9.91	1.01	0	9	14	10	7
1913........	74.4	+0.7	100	41	2.52	−2.27	4.72	1.50	0	8	20	9	2
1914........	71.5	−2.2	97	40	6.05	+1.26	8.57	1.94	0	15	9	11	11
1915	72.8	−0.9	98	44	5.31	+0.52	11.06	2.23	0	14	10	13	8
1916........	74.4	+0.7	97	45	5.40	+0.61	9.01	3.15	0	12	11	9	11
1917........	74.2	+0.5	104	46	4.83	+0.04	7.93	2.38	0	12	10	11	10
1918........	72.2	−1.5	104	39	3.93	−0.86	13.60	1.20	0	8	17	9	5
1919........	73.5	−0.2	103	43	8.39	+3.60	14.14	4.45	0	14	14	7	10
1920........	71.7	−2.0	96	42	5.76	−0.97	16 25	1.20	0	11	17	10	4
1921........	76.5	+2.8	99	43	3.62	−1.17	7.36	1.66	0	10	14	9	8
1922........	73.0	−0.7	98	44	5.79	+1.00	9.26	2.29	0	13	13	9	9
1923........	71.9	−1.8	102	40	3.88	−0.91	6.28	0.93	0	11	15	8	8
1924........	71.6	−2.1	98	41	2.59	−2.20	5.08	0.84	0	6	19	8	4
1925........	72.0	−1.7	99	39	7.37	+2.58	10.09	4.03	0	13	15	9	7
1926........	73.0	−0.7	105	40	5.46	+0.67	8.51	1.29	0	12	16	7	8
1927	72.7	−1.0	99	36	6.06	+1.27	9.34	2.95	0	11	13	10	8
1928........	74.2	+0.5	96	41	6.86	+2.07	10.22	2.21	0	12	16	8	7
1929........	73.0	−0.7	102	**33**	1.64	−3.15	**3.93**	0.51	0	6	17	9	5
1930........	74.3	+0.6	105	42	3.98	−0.81	6.45	1.85	0	10	16	9	6
1931........	76.6	+2.9	102	50	4.24	−0.55	7.55	0.80	0	11	13	10	8
1932........	73.8	+0.1	98	41	2.76	−2.03	5.54	0.82	0	8	19	8	4
1933........	73.4	−0.3	105	41	3.73	−1.06	6.05	1.20	0	8	16	8	7
....	.....	......	......	......	.....	......	.....	.....	.....	....	....	....	....
Period.....	73.7	....	107	33	4.79	....	20.80	0.15	0	10	13	11	7

W. B. O. Philadelphia-8-24-33-875.

Climatological Data for July, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	precipitation .01 inch or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	74.6	+1.4	102	31	47	4	36	3.03	−1.95	0.55	0	7	21	6	4	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	72.5	+2.5	99	31	40	4	38	4.10	−0.73	3.04	0	7	22	5	4	ne.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	49	3†	....	3.75	−0.82	1.53	0	5	22	6	3	s.	Briee E. Riker.
Dover	Morris	600	49	72.2	+0.8	100	31	44	4	33	3.65	−1.62	2.00	0	9	6	18	7	......	William C. Harris
Layton	Sussex	480	32	71.6	+0.7	101	31	44	4	40	2.68	−1.58	0.79	0	9	11	12	8	sw.	A. M. Depue.
Long Valley	Morris	520	3	71.0	......	98	31	41	4†	39	2.75	......	0.90	0	6	25	1	5	se.	S. N .Dilts.
Newton	Sussex	769	50	73.6	+1.1	105	31	47	4	36	1.20	−3.76	0.50	0	4	17	11	3	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	71.2	−2.9	102	31	48	4	31	2.73	−2.12	1.74	0	4	21	5	5	......	Town Engineer.
Sussex	Sussex	442	38	73.5^{a}	+1.4	99	31	45	4	36	3.35	−1.05	1.29	0	9	17	8	6	......	A. J. W. Mowatt
Means and extremes	......	......	....	72.5	+0.7	105	31	41	4†	40	3.03	−1.70	3.04	0	7	18	8	5	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	72.0	−0.5	98	31	46	5	38	3.31	−1.59	1.58	......	8	17	1	13	sw.	John Kline.
Canoe Brook	Essex	173	3	72.0	......	99	31	42	4	38	3.40	......	0.94	......	9	18	5	8	w.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	......	......	......	......	....	3.80	−0.64	1.37	......	8	23	2	6	......	Paul Molitor. Sr.
Elizabeth	Union	45	54	75.2	−0.1	101	31	49	4	34	5.98	+0.82	1.86	0	9	18	8	5	se.	Union County Park Comm.
Flemington	Hunterdon	140	§47	75.0	+0.4	101	31	48	4	33	4.47	−0.75	1.68	0	7	23	2	6	w.	Hiram E. Deats.
Jersey City	Hudson	10	35	74.6	−1.5	102	31	55	3	27	3.10	−1.34	1.40	0	7	10	14	7	w.	S. K. Pearson.
Lambertville	Hunterdon	430	46	73.1	−1.2	98	31	47	4	31	4.64	−0.18	1.68	0	9	19	5	7	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	74.4	+0.6	103	31	47	4	33	5.31	+0.92	3.66	0	9	20	5	6	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	74.2	+0.2	99	30†	51	4	27	3.12	−1.92	1.28	0	8	21	6	4	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	40	15	......	......	......	......	......	......	....	4.47	......	3.20	......	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	75.0	+0.6	103	31	49	4	30	5.14	+0.12	3.45	0	7	14	11	6	w.	William H. Meyer.
Plainfield	Union	120	45	73.4	−0.6	101	31	48	4	30	4.58	−1.25	1.81	0	9	8	15	8	sw.	S. K .Pearson.
Ridgefield	Bergen	80	16	72.9	......	100	31	49	4	29	2.82	......	1.20	0	8	12	12	7	sw.	George P. Kirsten.
Somerville, (near)	Somerset	70	50	......	......	......	......	......	......	....	......	......	......	.. ..	....	....	....	....	......	Julius Gerlieh.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	......	....	4.25	......	2.68	0	8	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	63	73.7	−0.1	100	31	55	3	25	2.77	−1.47	1.35	0	7	10	10	11	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.8	−0.2	103	31	42	4	38	4.17	−0.58	3.66	0	8	17	7	7	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	72.2^{a}	−1.6	98	31	47	4	32	5.62	+1.51	1.80	......	10	9	10	12	se.	A. F. Waldron.
Bridgeton	Cumberland	30	50	74.4	−2.3	98	31	50	4	30	6.05	+1.56	1.80	0	8	18	9	4	sw.	Bennett K. Matlack
Burlington	Burlington	12	§47	75.4	+0.4	100	31	52	4	33	2.41	−2.33	0.98	0	5	21	5	5	sw.	Public Service Power Co.
Camden	Camden	20	1	75.3	......	98	31	52	3	27	5.44	......	1.72	0	8	10	15	6	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	73.8	......	100	31	49	4	29	2.55	−2.67	1.20	0	8	18	5	8	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	......	......	.	......	......	......	....	......	......	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	74.1	−0.3	101	31	49	4	33	2.81	−2.18	1.24	0	7	19	7	5	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	73.8	−0.9	101	31	49	4†	35	4.86	+0.20	1.32	0	7	12	11	8	ne.	James M. Armstrong.
Lakewood	Ocean	54	29	73.3	+0.5	96	31	49	4†	30	3.39	−1.46	1.17	0	10	16	4	11	sw.	R. W. Holman.
Moorestown	Burlington	62	70	73.9	−0.8	97	31	52	3†	28	5.81	+1.13	1.54	0	9	11	17	3	w.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	3.49	−0.11	1.36	0	7	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	74.2	......	98	31	49	13	32	3.80	......	1.12	0	9	17	6	8	e.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	72.8^{a}	......	97	31	47	4	27	4.12	+0.14	1.27	......	9	15	10	6	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	3.64	......	1.38	0	7	16	8	7	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	72.8	......	103	31	43	14	38	3.06	......	1.38	0	6	18	9	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	74.1	−0.4	98	31	52	3	26	3.42	−0.52	1.61	0	10	10	13	8	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	......	......	......	....	4.78	......	1.13	0	9	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	72.3	−1.8	94	30†	52	13	30	3.53	−0.35	1.16	0	7	16	5	10	sw.	John H. Brown.
Philadelphia, Pa	......	114	62	76.6	+0.4	99	31	54	3	24	4.70	+0.55	1.74	0	8	12	10	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.7	−0.8	103	31	43	14	38	4.05	−0.30	1.80	0	8	15	9	7	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	73.2	+0.8	97	30	56	3	26	2.10	−2.44	1.23	0	9	20	8	3	sw.	Information Bureau.
Atlantic City	Atlantic	16	60	72.4	+0.3	94	31	54	4	22	2.80	−1.13	1.18	0	10	6	9	16	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	73.0	+0.9	96	30	53	13	29	2.53	−2.39	1.03	0	8	11	10	10	w.	William D. Martin.
Sandy Hook	Monmouth	22	35	73.4	−0.1	99	31	54	3	25	2.28	−2.84	0.74	0	10	11	8	12	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.0	+0.5	99	31	53	13	29	2.43	−2.20	1.23	0	9	12	9	10	sw.	
For the State	......	......	....	73.4	−0.3	105	31	41	4†	40	3.73	−1.06	3.66	0	8	16	8	7	sw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for July, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		.55	.47													.53	.33					.48			.15						.52	3.03
Charlotteburg	Passaic		2.44	.60		.06											.30	.20								.40	.10						4.10
Culvers Lake	Delaware	.43	T.	1.53		T.											.46	.40			T.		T.			.93							3.75
Dover	Passaic	2.00	*	.70	.03					.06							*	.74			T.					.10						.02	3.65
ayton	Delaware	.57		.79		.02						.08					.20	.23			.09					.65	.05						2.68
ong Valley	Morris	.52	.50	.90		.06											.71										.06						2.75
ewton	Delaware	T.				.03											.50	.37			T.		T.		T.	.30	T						1.20
hillipsburg	...do	T.	.68	1.06						T.							.58	.41								T.	T.						2.73
ussex	Hudson	.59	1.29	.55								.07					.07	.16			.04					.56	.02						3.35
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic	.08	1.58	.40	.18	.08							T.				.05	.84									.10	T					3.31
anoe Brook ‖‖	Essex	.54	.94	.61	.02	.02											.40	.79				.06					.02						3.40
hatham ‖	...do	.65	.91	.31	.29	.09	.02											1.37				.16					T.						3.80
lizabeth	Coast	1.04	1.37	.51	...	.02				1.15							1.82	.04			.01	T.				T.	.02						5.98
lemington	Raritan	.37	.63	1.23		T.				.01			T.				1.68	.52								T.	.03						4.47
ersey City	Coast	1.40	.08	.57	T.	.02				.02			T.			T.	1.00	T.			T.					.01	T					T.	3.10
ambertville	Delaware	.57	.68	1.13		.03				.03							1.68	.44								.02	.06						4.64
ittle Falls ‖‖	Passaic	.16	3.66	.52	.09	.03											.24	.52			.04						.05						5.31
ew Brunswick	Raritan	.45	.10	1.15		.01											1.28	.04								T.	.05	.04					3.12
ew Milford ‖‖	Hackensack	.10	3.20	.32	.11	.04											18	.43									.09						4.47
aterson	Passaic	.24	3.45	.54		.02	T.										.54	.13		T	T.					T.	.22					T.	5.14
lainfield	Raritan	.51	.17	.54		.02				1.22						T	1.81	.04			.25					.02							4.58
idgefield**	Hackensack	1.20	.07	.48	.01	T.										T.	.70			.12	.04					.20							2.82
omerville	Raritan																																......
oodcliff Lake ‖‖	Hackensack	.18	2.68	.38	.35	.06											.03	.46									.11						4.25
ew York, N. Y***	Coast	1.28	.08	.55	T.	.02				.02			T.			T.	.81	T.								.01	T					T.	2.77
The Southern Interior.																																	
elleplain	Tuckahoe	1.50	.42	.86	.04					.07	1.80	T.					T.	.02	T.							*	.28	.63					5.62
ridgeton	Delaware	1.80		1.44						.29							.84	.04								.60	.61	.43					6.05
urlington	Delaware	.29		.98														.14									.34	.66					2.41
amden***	...do		.52	1.12	T.	T.				.01							1.49	.03								.64	1.43	.20					5.44
reehold	Raritan	.37	.20	1.20	.05					.02							.46										.05	.20					2.55
ammonton	Mullica																																....
ightstown	Raritan		.21	1.24						.10							.92	.02									.12	.20					2.81
dian Mills	Mullica	1.32	.44	.88												T.	.83									.74	.24	.41					4.86
kewood	Metedeconk	.30	.20	1.17		.04				.08							.45	.02								.20	.58	.35					3.39
oorestown ‖‖	Delaware	.83		.94	.53	.04				.12	.05							1.47	T								1.54	.29					5.81
orthfield	Coast	1.36		1.12						.05						.05		T.								.15	.24	.52					3.49
emberton	Delaware	.01	.15	.97						.31							1.12	.24								.58	.19	.23					3.80
easantville ‖‖	Coast	1.27		.82	.42	.01					.26						.01	.01	T.								.76	.56	T.				4.12
rt Norris	Maurice	.50		1.38							.19	.39						.16									.32	.70					3.64
nyon	Coast	.31	.18	1.20													1.08	.17										.12					3.06
enton***	Delaware	.05	.53	1.08	T.	.02			T.	.21			T.			T.	.93	.14								.01	.28	.17					3.42
enton No. 2 ‖‖	...do	.91	.07	1.06	.63						.36						.62	.63									.30	.20					4.78
ckerton	Coast	.97		1.16		.19											.03											.55	.61	.02			3.53
ila., Pa***	Delaware		.79	.64	T.				T.	.01						T.	1.06	.15								.71	1.11	.23					4.70
The Sea Coast.																																	
bury Park	Coast	.12	.45	.78	.04	T.				.05						T.	.34				T.	T.				.05	.09	.18					2.10
lantic City***	...do	.08	.34	.84	.09	T.				.61					T.	T.	.03	.01				T				.14	.29	.37					2.80
ng Branch**	...do	.80	.19	.84	.07	T.				T.							.41									.02	.01	.19					2.53
ndy Hook***	...do	.53	.16	.44	.07	.01				.26						T.	.67	.06								T.	.01	.07					2.28

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of servation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipi-ion measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
antic City	30.02	30.30	4	29.73	1	14.1	50	ne.	3	82	73	83	56
mden	30.02	30.35	4	29.68	1	7.6	26	ne.	3	73	55	67	......
ng Branch	30.01	30.30	4	29.63	1	......	......	......	......	76	71	66	65
w York, N. Y	30.00	30.31	4	29.61	1	11.1	56	n.	1	78	61	71	66
iladelphia, Pa	30.02	30.35	4	29.71	1	11.1	36	ne.	3	74	54	62	65
dgefield	30.00	30.30	4	29.61	1	......	......	......	......	......	......	......	......
ndy Hook	30.01	30.29	3	29.68	1	11.4	50	ne.	1	80	70	79	63
enton	30.01	30.32	4	29.67	1	8.0	24	ne.	3	78	56	67	74

Daily Temperatures for July, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	98	90	65	82	87	91	94	91	85	88	82	82	86	84	70	75	85	89	91	95	94	88	97	98	89	78	85	91	97	99	102	88.0
	Minimum	67	62	53	47	53	57	62	64	67	52	60	60	55	52	58	64	64	55	55	64	68	68	65	70	64	63	63	58	67	70	71	61.2
Charlotteburg	Maximum	92	98	78	74	78	84	88	89	93	81	81	78	76	78	80	83	80	84	88	89	88	88	94	93	93	75	77	84	93	97	99	85.6
	Minimum	68	60	49	40	56	58	66	68	70	48	66	64	63	47	49	51	63	48	51	63	59	62	63	64	66	60	62	54	63	69	72	59.4
Dover	Maximum	92	76	64	77	79	88	89	87	82	81	75	75	78	77	73	67	79	86	87	89	88	83	93	93	78	74	82	85	95	96	100	82.8
	Minimum	69	62	51	44	59	....	62	65	67	53	61	60	54	52	57	63	65	54	58	65	66	68	65	71	63	62	60	58	66	73	74	61.6ᵃ
Layton	Maximum	97	81	69	81	81	87	92	89	83	85	80	80	83	82	81	79	84	87	91	89	91	86	99	97	75	79	83	85	96	98	101	86.2
	Minimum	67	60	47	44	58	53	55	60	63	50	55	52	51	47	52	48	64	49	51	57	63	70	63	61	62	61	57	55	61	65	69	57.1
Long Valley	Maximum	92	80	70	78	74	78	89	89	83	84	78	78	80	78	75	73	81	85	86	90	88	87	93	94	85	76	82	86	93	96	98	83.8
	Minimum	65	66	53	41	41	50	60	59	67	51	59	57	50	49	51	62	63	52	55	61	62	67	63	65	65	61	59	57	54	69	71	58.2
Newton	Maximum	90	88	84	80	89	87	91	87	86	84	80	82	79	82	77	72	82	86	89	90	90	85	96	95	87	82	80	87	95	101	105	86.7
	Minimum	65	62	60	47	59	60	60	66	67	55	56	53	56	50	51	61	64	56	57	66	66	67	65	70	60	60	58	57	65	65	71	60.5
Phillipsburg	Maximum	92	76	62	65	86	81	82	82	82	86	67	65	65	80	70	71	76	76	87	88	83	83	83	88	78	68	83	87	95	99	102	80.3
	Minimum	68	60	52	48	60	60	62	62	64	56	62	60	55	52	62	65	64	56	58	65	68	68	76	70	66	64	64	57	65	68	71	62.2
Sussex	Maximum	87	87	69	80	78	90	....	89	82	83	85	83	86	87	76	75	83	82	82	88	92	85	97	93	83	79	85	90	93	93	99	85.4ᵃ
	Minimum	68	64	53	45	60	58	....	65	66	55	60	58	54	51	56	65	65	55	57	63	66	71	67	71	62	62	60	59	68	70	73	61.6ᵃ
The Red Sandstone Plain.																																	
Boonton§§	Maximum	94	79	72	79	84	87	89	89	87	82	78	79	81	79	76	69	81	85	88	88	87	86	92	92	77	78	83	87	93	94	98	84.3
	Minimum	69	65	52	55	46	57	61	62	60	64	54	58	59	52	48	53	64	63	54	56	63	65	64	66	68	61	59	54	64	67	70	59.8
Canoe Brook§§	Maximum	93	82	81	80	81	86	90	91	87	83	79	77	79	77	75	72	82	86	88	90	87	86	93	94	85	78	82	86	94	95	99	85.1
	Minimum	66	63	52	42	57	51	57	60	65	57	58	57	51	50	52	63	64	51	54	61	65	63	61	66	65	62	60	54	64	69	67	58.9
Elizabeth	Maximum	95	90	78	77	83	88	98	91	87	85	84	77	78	77	75	69	79	92	92	99	97	83	95	98	87	76	84	89	97	98	101	87.1
	Minimum	68	67	53	49	60	58	64	61	69	61	64	62	56	56	60	65	66	58	61	67	69	68	67	68	69	64	64	60	66	72	73	63.4
Flemington	Maximum	95	88	70	79	86	91	93	93	87	89	83	78	83	79	78	78	87	89	92	93	92	91	97	97	86	77	82	87	98	97	101	87.6
	Minimum	68	67	52	48	60	61	63	65	70	56	63	59	53	54	57	64	64	58	59	66	68	66	65	68	68	63	62	60	65	72	73	62.5
Jersey City	Maximum	92	80	69	76	81	87	89	89	88	83	79	77	76	75	74	69	81	86	89	91	84	85	92	94	81	79	80	84	93	95	102	83.9
	Minimum	69	63	55	56	61	65	68	69	68	64	62	61	59	60	61	62	65	64	68	70	69	67	70	71	67	64	65	64	66	73	78	65.3
Lambertville	Maximum	92	87	61	77	84	84	88	90	86	84	81	77	79	75	76	76	79	84	87	89	89	87	93	93	82	72	78	83	91	93	98	83.7
	Minimum	68	60	51	47	60	53	65	65	70	67	62	58	53	53	58	63	63	62	64	67	70	65	66	69	65	62	60	61	65	71	74	62.5
Little Falls§§	Maximum	96	79	70	80	82	90	91	91	87	85	82	81	81	83	78	71	84	89	91	92	89	88	96	97	77	80	86	88	98	99	103	86.6
	Minimum	68	66	53	47	59	57	61	67	71	56	61	62	55	56	52	64	62	56	58	65	68	66	65	68	70	62	61	59	67	74	72	62.2
New Brunswick	Maximum	95	90	73	75	79	85	89	89	87	85	80	80	79	77	77	73	81	85	88	88	88	87	94	93	91	75	78	84	91	99	99	85.0
	Minimum	70	67	53	51	59	60	63	65	72	60	64	60	54	56	57	64	65	59	61	67	70	65	67	68	69	63	61	61	65	72	75	63.3
Paterson	Maximum	95	80	68	79	80	89	92	90	86	83	79	78	81	80	76	70	82	90	90	91	88	85	95	96	87	75	85	88	96	98	103	85.6
	Minimum	69	68	53	49	60	66	66	69	70	60	61	63	56	55	60	65	66	62	61	70	70	68	67	72	65	63	63	63	67	74	73	64.3
Plainfield	Maximum	94	80	70	75	82	88	90	89	89	84	79	76	76	75	75	69	82	87	89	91	87	86	94	95	82	79	80	85	94	96	101	84.5
	Minimum	68	66	56	48	59	58	62	65	67	60	61	59	54	53	57	64	64	57	59	66	68	64	65	68	68	63	63	59	65	71	72	62.2
Ridgefield	Maximum	90	77	64	76	78	83	86	88	85	80	79	75	79	77	75	72	80	84	89	89	82	83	93	94	80	76	79	82	94	96	100	82.7
	Minimum	68	63	53	49	57	63	66	68	70	60	60	56	54	56	57	60	64	64	66	68	66	67	69	70	62	61	63	63	65	71	76	63.1
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	90	77	65	76	78	84	86	88	84	80	79	77	77	73	72	67	80	84	86	89	82	83	88	92	80	77	80	82	91	92	100	81.9
	Minimum	69	63	55	57	62	65	68	70	68	64	62	62	60	60	61	62	65	66	69	71	69	68	70	72	64	64	66	65	66	73	76	65.5
The Southern Interior.																																	
Belleplain	Maximum	92	85	66	75	....	85	88	88	88	82	75	74	74	72	77	82	81	82	89	84	86	85	91	91	88	73	77	79	87	92	98	82.9ᵃ
	Minimum	62	62	55	47	....	56	61	69	68	56	63	53	53	59	60	63	66	60	57	67	64	60	61	65	66	66	59	57	62	72	72	61.4ᵃ
Bridgeton	Maximum	95	85	68	80	85	87	90	92	90	84	79	77	81	75	82	83	83	88	91	85	90	88	94	93	89	73	78	79	90	93	98	85.3
	Minimum	68	66	54	50	58	60	62	67	71	62	63	58	54	57	60	64	68	64	63	68	66	64	65	69	69	64	57	63	67	72	73	63.4
Burlington	Maximum	94	91	81	74	86	88	93	92	90	92	89	79	82	80	83	82	83	89	91	90	91	92	90	95	93	84	82	85	89	95	100	87.9
	Minimum	79	65	53	52	61	60	63	65	62	59	65	60	53	58	62	60	64	60	62	64	62	65	63	66	69	66	62	62	62	67	75	62.8
Camden	Maximum	95	82	64	79	86	88	93	93	93	88	80	78	82	76	80	82	82	90	90	90	91	91	95	96	82	72	79	84	91	95	98	86.0
	Minimum	69	63	52	54	61	64	66	67	73	61	63	60	55	59	62	64	66	64	66	69	71	64	68	71	67	64	60	63	68	74	75	64.6
Freehold	Maximum	92	86	67	75	81	87	90	91	92	84	79	76	77	73	75	77	84	87	90	91	90	87	94	96	92	74	80	86	92	91	100	85.0
	Minimum	70	67	55	49	60	62	62	62	64	64	64	59	51	51	59	60	64	60	63	66	68	65	66	68	66	63	60	60	65	72	76	62.6
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	93	88	63	75	81	85	90	91	88	87	82	77	79	76	77	79	82	86	89	90	91	95	97	97	92	74	79	84	92	97	101	85.7
	Minimum	68	62	51	49	59	59	63	65	70	60	62	67	50	54	58	64	64	61	63	67	69	62	65	68	66	63	61	61	65	71	72	62.5
Indian Mills	Maximum	91	86	63	76	83	87	92	92	91	88	77	77	80	75	83	83	82	88	92	87	90	91	98	97	84	75	81	82	92	96	101	85.9
	Minimum	68	63	54	49	59	57	60	65	71	58	60	55	49	57	60	65	65	60	60	66	70	63	63	65	65	64	58	59	63	71	72	61.7
Lakewood	Maximum	94	88	68	75	79	88	91	94	90	81	76	74	74	73	76	77	82	87	90	90	86	85	90	95	88	72	79	84	91	94	96	84.1
	Minimum	68	68	52	49	57	58	63	65	72	61	62	55	49	56	61	65	66	60	62	67	68	64	65	66	66	63	60	59	64	71	74	62.5
Moorestown	Maximum	91	81	62	78	84	87	90	90	90	86	80	78	81	75	79	81	81	86	88	88	89	89	94	93	82	72	79	81	89	93	97	84.3
	Minimum	69	62	52	52	60	61	64	66	72	58	61	57	53	59	62	64	65	64	64	68	68	65	66	70	67	64	60	62	66	73	74	63.5
Pemberton	Maximum	93	81	65	78	85	86	90	91	89	86	80	79	81	74	80	82	89	87	89	89	89	89	94	95	90	75	78	84	90	93	98	85.5
	Minimum	70	65	53	50	60	59	61	64	72	61	64	65	49	57	59	64	64	60	61	66	70	64	65	67	66	64	60	62	65	71	74	63.0
Pleasantville§§	Maximum	93	81	74	74	84	....	89	85	90	79	74	71	72	71	75	78	84	85	91	82	83	81	88	87	83	74	76	79	90	94	97	82.1ᵃ
	Minimum	68	67	58	47	57	58	....	66	70	59	63	63	51	60	62	65	66	65	64	67	71	64	64	68	70	67	60	60	65	68	74	63.6ᵃ
Runyon	Maximum	94	89	70	78	82	89	93	93	90	88	78	74	75	77	76	75	84	89	91	93	90	94	98	99	94	79	81	86	96	96	103	86.9
	Minimum	67	69	53	46	56	53	62	61	62	60	62	48	47	43	46	64	64	53	58	64	65	56	61	64	64	60	60	53	63	63	73	58.7
Trenton	Maximum	93	76	62	78	84	86	90	91	87	86	77	76	78	73	78	79	82	87	89	89	89	89	94	93	82	72	78	83	92	94	98	84.0
	Minimum	68	61	52	53	61	64	66	67	68	62	63	61	57	59	60	64	65	64	65	69	71	65	69	70	64	63	61	64	66	72	75	64.2
Tuckerton	Maximum	90	80	63	70	75	75	80	86	80	85	76	67	71	70	70	77	82	87	91	93	90	90	91	91	93	85	75	78	80	94	94	81.6
	Minimum	68	54	54	57	59	57	61	60	70	70	59	57	52	58	60	61	62	62	71	65	75	60	70	71	70	60	58	60	61	70	80	63.0
Philadelphia, Pa.	Maximum	91	85	65	79	86	87	91	92	88	86	83	80	83	77	78	81	82	87	90	87	89	90	94	93	86	73	78	80	92	95	99	85.5
	Minimum	70	64	54	57	63	70	70	71	74	69	67	63	62	62	63	66	67	70	71	72	74	68	72	73	68	65	62	66	69	75	81	67.7
The Sea Coast.																																	
Asbury Park	Maximum	94	81	69	73	81	87	92	87	88	73	74	70	71	68	70	72	81	87	82	88	76	78	82	82	78	72	74	80	86	97	92	80.2
	Minimum	68	65	56	59	60	65	67	70	71	65	66	64	57	63	62	65	68	65	68	70	69	66	69	70	67	66	64	64	68	74	77	66.1
Atlantic City	Maximum	86	80	66	72	83	86	81	77	88	76	72	68	70	69	72	74	81	80	86	77	79	79	81	81	80	71	74	77	80	90	94	78.4
	Minimum	68	64	56	54	61	65	68	68	70	67	66	62	59	61	64	65	69	70	70	71	70	69	69	70	70	65	61	67	68	73	77	66.4
Long Branch	Maximum	95	74	63	72	80	87	93	93	87	76	74	73	70	69	72	71	83	88	92	91	81	80	85	88	78	71	77	81	93	96	95	81.5
	Minimum	70	63	54	58	60	60	64	70	68	63	66	62	53	58	60	66	65	61	65	69	70	66	67	68	67	64	62	63	66	74	75	64.4
Sandy Hook	Maximum	89	73	64	72	76	84	88	89	83	76	74	70	69	67	71	69	81	85	88	90	80	77	83	89	77	73	79	84	92	94	99	80.2
	Minimum	70	64	54	59	63	65	68	70	67	65	66	63	61	61	62	65	68	68	69	72	71	69	70	71	65	65	64	67	68	76	74	66.5

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	.284	.186	.044	.116	.128	.232	.240	.200	.192	.232	.160	.176	.216	.216	.096	.006	.144	.192	.192	.188	.192	.168	.224	.240	.084	.096	.184	.216	.208	.240	.232	5.524
	Wind movement	27	26	47	15	12	9	15	12	9	13	18	16	20	22	22	22	19	9	12	9	13	24	21	16	13	18	9	9	22	15	16	530
Pleasantville**	Evaporation	.160	.340	.100	.170	.128	*	.272	.256	.228	.272	.160	.224	.240	.128	.170	.170	.128	.240	.304	.208	.288	.128	.336	.288	.120	.080	.144	.144	.256	.320	.304	6.306
	Wind movement	73	7	170	87	52	30	*	101	52	31	45	59	54	69	42	60	31	23	63	38	62	31	1	88	58	46	40	32	50	69	63	1627
Runyon	Evaporation	.246	.180	.240	.120	.120	.180	.220	*	.210	.220	.210	.210	.210	.180	.180	.120	.110	.180	.210	.180	.240	.240	.240	.240	.180	.120	.120	.180	.240	.240	.260	5.826
	Wind movement	22	44	60	29	14	29	13	17	16	14	29	18	22	23	29	20	10	6	16	18	16	12	13	20	20	11	17	22	27	20	22	619

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

1.05
N J

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXVIII. AUGUST, 1933. No. 8.

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GENERAL SUMMARY.

The outstanding weather characteristic of the month was its wetness. The average rainfall for the State, 10.53 inches, was the greatest on record for the month of August, and the second greatest monthly amount ever recorded. July, 1897, had a monthly total of 11.42 inches.

About two-thirds of the monthly total fell during the period from the 17th to 24th, inclusive, a great deal of this being due to a tropical storm that entered the country at the North Carolina coast line and then proceeded almost due north over central Pennsylvania and out the St. Lawrence Valley after its recurve. The amounts measured from the 21st to 24th, inc., ranged between four and eleven inches, six inches being about the average for the State. Pleasantville experienced the heaviest amount, 15.15 inches, with nearby Atlantic City having a total of 14.50 inches. At Atlantic City 8.16 inches fell during a 24-hour period on the 21st-22d, but this amount, as well as the monthly total, has been exceeded on two other occasions.

The temperature averaged nearly normal, and ranged from around the 100-degree mark on the 1st to the monthly minima in the high forties and low fifties, occurring mostly on the 11th, 15th and 30th. The majority of the days were above normal, with warm periods during the 1st-3d and the 24-28th and cool spells on tne 10-11th, 21st-22d, and the 29th-31st.

Gales from the northeast to southeast prevailed quite generally during the 23d-24th, especially along the coast, a maximum of 65 miles per hour being recorded at Atlantic City. Floods followed the heavy rains attending the passage of the tropical storm, and the total loss to the State from wind and water is conservatively estimated at $3,000,000.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 72.7°, which was 0.9° above normal. The highest temperature was 101° at Little Falls and Burlington on the 1st and at Runyon on the 2d, and the lowest, 45°, at Charlotteburg on the 15th. The greatest daily range of temperature was 39° at Layton on the 5th. The highest monthly mean temperature was 75 3° at Burlington, and the lowest, 70.1° at Long Valley.

The temperature departure from the normal for the year, 1933, to date, by sections, is: The Highlands, +2.6°; Red Sandstone Plain, +1.0°; Southern Interior, +2.2°; Sea Coast, +2.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 10.53 inches, which was 5.78 inches above normal. The greatest monthly precipitation was 15.15 inches, at Pleasantville, and the least, 6.45 inches at Sandy Hook. The greatest amount of precipitation in any 24 consecutive hours was 8.16 inches at Atlantic City on the 21st-22d The mean of the number of days on which 0.01 inch or more of precipitation fell was 14, or 4 more than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands. +4.09 inches; Red Sandstone Plain, +5.17 inches; Southern Interior, +5.85 inches; Sea Coast, +3.32 inches.

WIND.

The prevailing wind direction was from the northeast. The wind movement averaged 11 miles per hour, which was 2 miles above normal. The highest velocity, sustained for 5 consecutive minutes, was 65 miles per hour from the east at Atlantic City on the 23d.

MISCELLANEOUS.

The per cent of possible sunshine was 56, or 10 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 29.98 inches, or 0.02 inch below normal. The highest reading was 30.37 inches at Camden and Ridgefield on the 7th, and the lowest 29.41 inches on the 23d at Camden.

The mean stage of the Delaware River at Phillipsburg was 3.7 feet, and the highest 25.0 feet on the 25th. At Trenton the mean stage was 2.3 feet, and the highest 12.7 on the 25th.

Thunderstorms occurred on the following dates: 1, 2, 3, 4, 8, 11, 13, 14, 15, 17, 18, 19, 20, 21, 23, 27 and 28. Dense fog occurred quite generally in the southwest part of the State on the 7th, it was observed on the 12th at Trenton, on the 13th at Trenton and at stations along the coast, and on the 19th at scattered places in the southern section of the State. Hail fell on the 1st at Newton, this was light in amount and did no damage.

COMPARATIVE DATA FOR AUGUST

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest, monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	71.7	−0.1	95	40	6.11	+1.36	10.09	3.47	0	....	....	....	....
1886	69.5	−2.3	96	42	2.81	−1.94	5.36	1.10	0	....	....	....	....
1887	70.4	−1.4	94	42	3.76	−0.99	7.34	2.09	0	....	....	....	....
1888	72.5	+0.7	98	41	6.13	+1.38	10.53	2.55	0	....	....	....	...
1889	69.6	−2.2	91	45	5.13	+0.38	9.06	1.93	0	....	....	....	....
1890	71.5	−0.3	99	40	4.90	+0.15	7.51	2.89	0	11	8	15	8
1891	72.8	+1.0	100	46	5.32	+0.57	8.89	2.58	0	13	8	11	12
1892	73.4	+1.6	99	46	3.63	−1.12	5.65	0.72	0	9	12	13	6
1893	72.8	+1.0	98	38	6.52	+1.77	11.94	3.55	0	8	14	11	6
1894	70.9	−0.9	97	44	2.58	−2.17	9.28	0.15	0	7	13	12	6
1895	74.2	+2.4	102	**34**	2.53	−2.22	5.06	**0.02**	0	7	16	12	3
1896	73.6	+1.8	105	39	1.83	−2.92	**3.27**	0.50	0	7	17	10	4
1897	71.0	−0.8	91	41	4.39	−0.36	8.69	2.07	0	9	14	12	5
1898	74.8	+3.0	98	42	5.36	+0.61	9.28	2.70	0	10	12	12	7
1899	72.3	+0.5	99	39	4.36	−0.39	9.70	2.16	0	9	10	12	9
1900	**76.3**	+4.5	104	41	2.68	−2.07	4.56	0.70	0	10	15	11	5
1901	73.8	+2.0	98	44	9.43	+4.68	15.80	4.88	0	11	12	10	9
1902	70.1	−1.7	93	40	3.91	−0.84	10.67	1.31	0	9	15	13	3
1903	68.4	−3.4	98	39	6.95	+2.20	14.54	4.30	0	13	10	10	11
1904	70.8	−1.0	92	37	6.62	+1.87	13.01	2.65	0	9	15	10	6
1905	71.1	−0.7	95	38	5.72	+0.97	9.88	3.51	0	12	13	10	8
1906	74 6	+2.8	97	42	5.95	+1.20	**17.91**	2.21	0	13	10	11	10
1907	70.5	−1.3	96	39	3.45	−1.30	7.61	1.79	0	10	14	12	5
1908	70.6	−1.2	103	36	5.05	+0.30	9.23	2.43	0	10	11	10	10
1909	70.2	−1.6	100	**34**	4.59	−0.16	12.94	1.41	0	6	14	9	8
1910	70.4	−1.4	92	36	3.78	−0.97	8.46	1.76	0	10	9	10	12
1911	72.1	+0.3	101	39	8.91	+4.16	14.74	5.31	0	11	10	11	10
1912	70.0	−1.8	95	35	3.42	−1.33	7.62	1.19	0	10	12	13	6
1913	71.7	−0.1	100	38	4.06	−0.69	10.21	1.93	0	10	18	9	4
1914	73.3	+1.5	98	46	3.15	−1.60	6.53	1.04	0	9	13	12	6
1915	70.9	−0.9	98	41	7.73	+2.98	10.92	4.02	0	13	11	11	9
1916	73.2	+1.4	100	40	**1.34**	−3.41	4.15	0.27	0	6	20	7	4
1917	74.0	+2.2	103	42	2.21	−2.54	5.68	0.86	0	8	18	9	4
1918	74.4	+2.6	**108**	40	1.85	−2.90	4.25	0.34	0	7	18	7	6
1919	69.9	−1.9	98	38	6.89	+2.14	12.88	3.09	0	13	13	10	8
1920	72.3	+0.5	94	42	6.10	+1.35	10.60	2.94	0	17	8	11	12
1921	69.8	−2.0	97	38	4.32	−0.43	8.01	2.05	0	9	18	7	6
1922	71 2	−0.6	96	39	4.03	−0.72	6.78	2.18	0	12	13	9	9
1923	70.8	−1.0	98	35	2.44	−2.31	4.81	1.23	0	8	17	8	6
1924	71.9	+0.1	102	38	4.40	−0.35	9.48	1.82	0	8	18	8	5
1925	71.0	−0.8	93	35	2.10	−2.65	4.12	0.94	0	7	20	6	5
1926	72.8	+1.0	101	38	6.58	+1.83	8.84	3.74	0	14	11	9	11
1927	**67.1**	−4.7	89	37	8.55	+3.80	12.87	2.88	0	12	11	9	11
1928	74.5	+2.7	99	45	6.72	+1.97	14.26	3.33	0	13	12	8	11
1929	69.8	−2.0	97	39	2.58	−2.17	4.86	0.88	0	9	16	8	9
1930	71.1	−0.7	101	**34**	3.32	−1.43	5.58	1.92	0	6	16	9	6
1931	73.5	+1.7	101	45	5.10	+0.35	9.61	2.26	0	12	12	8	11
1932	73.5	+1.7	99	44	2.75	−2.00	7.49	1.00	0	7	20	7	4
1933	72.7	+0.9	101	45	**10.53**	+5.78	15.15	**6.45**	0	14	12	9	10
....	......	......	......	......	......	......	......	......	......	....	....	....	....
Period	71.8	....	108	34	4.75	....	17.91	0.02	0	10	13	11	7

W. B. O. Philadelphia-9 27-33-875.

Climatological Data for August, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	72.7[a]	+1.7	98	1	52	30	33	10.30	+5.69	2.14	0	11	15	5	11	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	70.2	+2.3	100	1	45	15	37	11.45	+6.83	5.10	0	11	14	9	8	ne.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	50	11	....	8.63	+4.21	2.35	0	12	17	4	10	ne.	Brice E. Riker.
Dover	Morris	600	49	70.4	+1.3	97	1	50	15	31	8.75	+3.99	4.11	0	14	4	16	11	......	William C. Harris
Layton	Sussex	480	32	70.3	+1.9	99	1	46	5	39	9.78	+5.88	2.58	0	14	8	8	15	sw.	A. M. Depue.
Long Valley	Morris	520	3	70.1	......	96	1	47	30	34	10.66	......	2.10	0	15	16	5	10	s	S. N .Dilts.
Newton	Sussex	769	50	71.2	+0.8	99	1	50	15	34	11.17	+6.75	2.82	0	15	7	9	15	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	71.7[f]	−0.1	92[f]	26	52	30	31[f]	13.70	+9.08	3.22	0	16	13	10	8	......	Town Engineer.
Sussex	Sussex	442	38	71.6[d]	+1.1	99	1	50[c]	15	34	8.78	+4.52	2.10	0	15	8	10	13	......	A. J. W. Mowatt
Means and extremes	......	......	....	71.0	+1.3	100	1	45	15	39	10.36	+5.87	4.11	0	14	11	9	11	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	71.0	−0.3	97	1	50	15	32	9.74	+4.66	4.05	......	15	10	7	14	ne.	John Kline.
Canoe Brook	Essex	173	3	71.0	......	100	1	47	30	35	8.57	......	2.98	......	14	14	8	9	n.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	......	......	......	......	....	9.79	+5.38	3.17	......	15	15	6	10	......	Paul Molitor, Sr.
Elizabeth	Union	45	54	73.8[a]	+0.4	100	1†	53	30	34	8.56	+4.27	2.49	0	14	13	9	9	ne.	Union County Park Comm.
Flemington	Hunterdon	140	§47	73.8	+1.3	100	1	54	30	33	10.56	+5.85	1.86	0	15	15	6	10	w.	Hiram E. Deats.
Jersey City	Hudson	10	35	74.2	+0.1	99	1	57	11	25	8.94	+4.41	2.19	0	15	8	11	12	n.	S. K. Pearson.
Lambertville	Hunterdon	430	46	71.8	−0.6	97	1	53	15	27	12.33	+7.67	3.34	0	12	15	7	9	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	72.8	−0.4	101	1	51	30	33	11.13	+6.73	4.26	0	15	13	4	14	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	72.9	+0.8	97	1†	55	15†	29	9.62	+4.47	2.38	0	12	13	13	5	w.	N. J. Experiment Station
New Milford‡‡	Bergen	40	15	......	......	......	......	......	......	....	8.97	......	2.82	......	14	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	73.2	+1.0	99	1	55	15†	29	10.16	+5.43	2.25	0	16	9	10	12	w.	William H. Meyer.
Plainfield	Union	120	45	72.2	+0.4	100	1	53	15†	31	7.93	+3.72	1.71	0	14	9	8	14	n.	S. K .Pearson.
Ridgefield	Bergen	80	16	72.0	......	99	1†	53	30	29	8.76	......	2.71	0	12	11	8	12	s.	George P. Kirsten.
Somerville, (near)	Somerset	70	50	......	......	......	......	......	......	....	......	......	......	......	....	..	....	....	......	Julius Gerlich.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	......	....	10.36	......	2.88	......	14	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	63	73.8	+0.7	95	1	58	11	21	9.21	+4.88	3.41	0	16	7	9	15	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	77.6	+0.3	101	1	47	30	35	9.74	+5.26	4.26	0	14	12	8	11	n.	
The Southern Interior.																				
Belleplain	Cape May	30	39	72.8[a]	+0.2	97	2	50	31	31	8.20	+3.90	3.10	......	11	7	11	13	se.	A. F. Waldron.
Bridgeton	Cumberland	30	50	75.0	0.0	99	1	56	30	28	9.75	+5.16	3.35	0	10	19	3	9	ne.	Bennett K. Matlack
Burlington	Burlington	12	§47	75.3	+1.1	101	1	56	15	32	13.46	+8.01	2.80	0	12	15	8	8	ne.	Public Service Power Co.
Camden	Camden	20	1	74.6	......	100	1	57	30†	28	9.37	......	3.15	0	14	9	11	11	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	72.8	......	99	1	52	30	28	8.51	+3.80	1.80	0	13	14	7	10	sw.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	73.4	+1.1	100	2	52	30	32	9.96	+5.38	1.85	0	14	13	9	9	se.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	73.4	+0.8	99	1	54	15†	31	14.35	+8.42	2.90	0	12	9	13	9	ne.	James M. Armstrong.
Lakewood	Ocean	54	29	72.4	+1.3	98	1	53	31	30	10.91	+4.86	1.78	0	14	16	3	12	sw.	R. W. Holman.
Moorestown	Burlington	62	70	72.9	+0.3	96	1	56	30	26	11.50	+6.61	3.63	0	12	5	12	14	ne.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	12.44	+8.09	3.31	0	13	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	74.1	......	97	1	55	30	29	12.77	......	3.02	0	11	14	6	11	se.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	73.0	......	97	1	52	31	25	15.15	+10.22	5.15	0	15	16	8	7	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	12.76	......	4.80	0	9	13	11	7	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	72.6	......	101	2	46	15	38	8.28	......	1.62	......	11	12	15	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	73.5	+0.5	98	1	56	11	25	10.09	+5.34	2.70	0	16	6	12	13	n	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	......	......	......	....	11.44	......	3.03	0	15	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	71.4	−1.3	96	1†	56	11	21	14.19	+8.65	3.55	0	12	7	16	8	ne.	John H. Brown.
Philadelphia, Pa.	......	114	62	76.0	+1.2	97	1	60	11	21	9.34	+5.22	3.76	0	14	10	5	16	ne.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.4	+0.4	101	1†	46	15	38	11.39	+6.54	5.15	0	13	12	9	10	ne.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	73.2	+1.4	92	2†	60	15†	22	9.65	+4.59	2.00	0	16	14	13	4	e.	Information Bureau.
Atlantic City	Atlantic	16	60	74.5	+2.0	92	26	61	12	20	14.50	+10.01	8.16	0	14	8	8	15	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	72.6	+1.6	100	1	56	15	27	9.63	+3.50	2.53	0	15	10	9	12	ne.	William D. Martin.
Sandy Hook	Monmouth	22	35	74.1	+1.6	97	2	60	11	22	6.45	+1.47	1.80	0	17	8	11	12	no.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.6	+1.6	100	1	56	15	27	10.06	+4.89	8.16	0	16	10	10	11	ne.	
For the State	......	......	....	72.7	+0.9	101	1†	45	15	39	10.53	+5.78	8.16	0	14	12	9	10	ne.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, [a], [b] [c], etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield i Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for August, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware				.82				.10			1.45			1.55			.11	.21	T.		.23	2.14	2.14	1.45					.10			10.30
Charlotteburg	Passaic		.25		.63							1.25			1.04			.03	.20		.03	.12	2.20	.60	5.10								11.45
Culvers Lake	Delaware		T.		.20				T.		.08	.93			1.08			.18	.32	.05		.05	2.35	1.43	1.86				.10				8.63
Dover	Passaic		T.		.64				.20		.11	.79		*	.95			.10	.30	.15		*	2.11	2.00	1.29					.11			8.75
Layton	Delaware			.15	.36				.04	T.	.31	.99			1.06			.03	.31	.28		.07	2.51	1.57	2.04					.06			9.78
Long Valley	Morris		.10		.84				.13		.15	1.56		.05	.68				.25	.91	.64	.27	1.90	2.10	1.02					.06			10.66
Newton	Delaware	.88			.50				.06	.10	.37	.78			.80			.04	.40	.48		.15	1.88	1.80	2.82					.11			11.17
Phillipsburg	do		.13	.33	.70				.03		.78	1.48	T.	1.36	.42			.05	.11	2.05		.68	1.75	3.22	.57				T.	.04		T.	13.70
Sussex	Hudson		.01		.32				.03	.26	.04	.98			1.26			.03	.46	.06		10	1.90	1.14	2.10					.09			8.78
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic	T.		.08	.93		T.			.11		.86			.66	.10	T.	.04	.11	.27	.58		1.60	.07	4.05	.14				.14			9.74
Canoe Brook ‖‖	Essex			T.	1.11					.20		1.18	T.		.79	.04		.07	.09	.14	.06	.04	1.68	.05	2.98					.14			8.57
Chatham ‖	do			T.	.97					.21		1.12	.06		.83	.21		.12	.17	.31	.12	T.	1.66	.61	3.17	.09					.14		9.79
Elizabeth	Coast		T.		.68				.32	.23	.02	1.31			1.00			.05	.28		.34	.77	1.35	1.14	.97				T.	.10			8.56
Flemington	Raritan		.17	.03	.79				T.	.07	.11	1.82			1.12			.08	.62		1.03	.51	1.42	1.86	.87					.06			10.56
Jersey City	Coast		T.	T.	.70				.70	.03	.04	.60			.73			.04	.35	.01		1.30	2.19	1.70	.06				.30	.19			8.94
Lambertville	Delaware		T.	T.	3.34						.13	1.38			.89			.11	.12		1.05	.78	1.04	2.24	1.14					.11			12.33
Little Falls. ‖‖	Passaic				1.15					.17		.71			.53	.09		.06	.05	.61	.46	.03	2.80	.07	4.26	.02				.12			11.13
New Brunswick	Raritan				.80	T.				.02	.02	1.44	T.	T.	.95			.05	2.38	T.	T	.79	1.44	.86	.71					.16			9.62
New Milford ‖‖	Hackensack	.03			.98					.13		.63			.67	.08			.10	.72	.10		2.04	.06	2.82	.08				.53			8.97
Paterson	Passaic				1.31				.08	.03	.05	.66			.60			.07	.47	.01	.44	.41	2.25	1.42	2.21				.03	.12			10.16
Plainfield	Raritan				1.15				.04	.10	.03	1.71			.97			.07	.08	.34		.58	1.30	1.69	.75					.12			8.93
Ridgefield**	Hackensack		T.		.77				.50	T.		.58			.64			.12	.32	T.		.34	2.34	.11	2.71				.05	.28			8.76
Somerville	Raritan																																
Woodcliff Lake ‖‖	Hackensack	.12			1.10					.31		.71			.51	.06			.09	.56	.46		2.77	.06	2.88	.12				.61			10.36
New York, N. Y***	Coast		T.	.47	.22				.76	T.	.26	.45		.24	.51			.04	.34	.02		2.25	1.28	1.79	.03				.35	.20			9.21
The Southern Interior.																																	
Belleplain	Tuckahoe				1.01					.17		.76			1.00	.15			.28			3.10	1.44					.07	.17	.05			8.20
Bridgeton	Delaware				.88							1.10			.42			.10	1.19	T.	.09	1.49	.56	3.35					.57			T.	9.75
Burlington	Delaware	.10			2.20						.80	.20			1.00			.15	.23		2 80	2.40	1.90	1.05					.63				13.46
Camden***	do			1.25	.09						.54	.54		.50	.82			.11	.70		T.	1.01	.60	3.15	.03				.01	.02		T	9.37
Freehold	Raritan				.78					.01	.04	1.80			.63				.56	.10		1.14	1.20	1.23	.30				.40	.32			8.51
Hammonton	Mullica																																
Hightstown	Raritan				1.25					T.		1.49	.02		.72			.08	.20	.09	.07	1.25	1.15	1.85	.99				.61	.19			9.96
Indian Mills	Mullica				.92						T.	1.18			1.45			.08		.20	.70	1.95	2.00	2.90	1.28				.85	.84			14.35
Lakewood	Metedeconk		.02		.51						.05	1.28			.77			.07	1.78	.55	T.	1.50	1.78	.98	.40				.70	.52			10.91
Moorestown ‖‖	Delaware			.11	1.20							1.34			1.46	.01		.09	1.02	T.		.17	1.82	.23	3.63					.42			11.50
Northfield	Coast		.11	.09	.75					.21		.48			1.12			.16	1.29			3.31	1.98	2.89	.02					.03		T.	12.44
Pemberton	Delaware				.94						T.	1.46			2.14			.09	.23			1.10	1.99	3.02	1.10				.04	.66			12.77
Pleasantville ‖‖	Coast			1.64	.63					.17	.89				1.28	T.		.14	.25	1.20	.01	.97	5.15	.63	2.10	.01				.08			15.15
Port Norris	Maurice				1.48					.08	.76				.83			.10	.70				3.05	4.80	T.					.96			12.76
Runyon	Coast				.74					.05		1.14			.78				.42			1.04	1.54	1.62	.24				.49	.22			8.28
Trenton***	Delaware			1.04	.21				T.	.01	.55	1.01		.41	.45			.05	1.41		.01	1.24	.86	2.70	.05				.01	.08			10.09
Trenton No. 2‖‖	do				1.34					.03		1.42	.01	.01	.79	.03		.07	.16	1.89		.35	1.86	.12	3.03					.33			11.44
Tuckerton	Coast				.33							3.55			1.41			.28	.52		.27	.97	3.08	2.14	.26				.27	1.11			14.19
Phila., Pa***	Delaware			1.07	.10				T.		.54	.50		.92	.27			.08	.59			1.07	.83	3.74	.02				.05	.06		T.	9.84
The Sea Coast.																																	
Asbury Park	Coast		.20		.45			T.		.03	.04	2.00	T.		.64			.06	1.04	.09	.29	1.25	1.54	1.18	.14				.20	.50			9.65
Atlantic City***	do		.49	.07	.79					.18	.12	.42			.50			.12	.81	T.	.04	8.12	.13	2.66	T				T.	.05		T.	14.50
Long Branch**	do		T.	.02	.52				T	.02	.02	2.53			.50			.05	.87	.02	.02	1.48	.76	1.70	.09				1.21	.32			9.63
Sandy Hook***	do		.01	.32	.28				.01	.03	.07	.73	T.		.53			.04	.23	T.	.30	1.37	.46	1.44	.07				.38	.18			6.45

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipi-ation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following easurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
tlantic City	29.98	30.35	7	29.47	23	15.8	65	e.	23	84	76	81	52
amden	29.98	30.37	7	29.41	23	8.0	38	e.	23	82	60	78	
ong Branch	29.98	30.35	7	29.49	24					80	76	66	53
ew York, N. Y	29.98	30.36	7	29.53	24	12.4	51	se.	24	80	64	71	54
hiladelphia, Pa	29.99	30.36	7	29.40	24	12.1	42	se.	23	77	59	68	48
idgefield	29.98	30.37	7	29.53	24								
andy Hook	29.98	30.35	7	29.51	24	13.0	39	s.	24	82	70	80	54
renton	29.98	30.35	7	29.47	24	8.8	34	se.	23	81	63	74	63

Daily Temperatures for August, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	98	97	90	80	85	86	88	88	87	....	73	80	89	79	81	83	80	82	86	85	75	68	73	73	89	92	89	89	80	82	74	83.4[a]
	Minimum	70	73	63	63	55	53	58	58	66	....	56	63	64	64	55	57	64	65	67	64	63	58	63	68	64	62	65	66	65	52	55	62.0[a]
Charlotteburg	Maximum	100	94	89	82	82	84	85	85	79	78	72	78	87	87	82	83	86	79	83	86	75	67	70	73	75	88	94	88	84	79	78	82.3
	Minimum	64	71	63	61	58	48	50	54	63	48	54	57	59	64	45	51	50	59	59	62	63	58	65	66	68	61	64	59	58	48	52	58.1
Dover	Maximum	97	95	84	72	80	82	81	84	81	74	70	78	87	77	81	80	75	78	80	75	69	68	73	75	85	87	85	83	75	75	70	79.2
	Minimum	67	75	65	64	54	55	56	59	66	52	56	66	71	66	50	54	64	64	66	63	61	61	66	69	67	63	66	62	62	51	53	61.7
Layton	Maximum	99	95	88	78	85	85	85	85	83	77	72	80	88	83	82	84	76	81	84	79	69	68	73	74	87	90	88	85	80	82	73	81.9
	Minimum	61	68	55	62	46	48	49	56	60	48	56	61	60	62	48	53	63	65	64	61	60	58	65	69	71	56	60	62	66	58	50	58.7
Long Valley	Maximum	96	94	85	78	83	84	84	85	84	80	70	80	87	78	82	80	82	82	79	79	76	72	74	75	82	88	88	85	78	76	72	81.2
	Minimum	65	73	60	63	53	56	54	52	66	51	55	60	61	65	48	49	50	60	65	61	61	59	60	71	66	62	65	60	60	47	51	59.0
Newton	Maximum	99	94	87	77	83	83	85	87	83	78	79	83	86	88	84	83	82	80	84	80	74	68	79	78	86	90	87	86	78	78	78	82.8
	Minimum	68	72	63	60	59	53	57	57	64	54	55	60	60	63	50	55	55	62	65	62	59	58	59	67	64	62	63	63	58	51	54	59.7
Phillipsburg	Maximum	....	....	....	....	....	....	86	89	86	77	69	82	91	78	84	83	79	83	85	80	71	71	74	76	88	92	89	88	80	81	72	81.4[f]
	Minimum	70	73	63	62	58	57	61	58	65	56	56	62	65	65	54	55	65	65	67	64	61	59	66	69	68	62	65	65	59	52	56	62.0
Sussex	Maximum	99	95	89	82	82	85	85	85	82	77	69	82	87	86	81	....	76	77	84	79	73	67	70	73	88	89	88	82	...	....	....	81.9[d]
	Minimum	70	72	62	64	52	51	55	57	64	54	57	63	64	65	50	....	55	63	66	64	63	58	63	68	67	60	65	64	62	....	....	61.4[e]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	97	95	87	75	84	85	84	84	82	77	74	78	89	77	81	83	78	82	83	80	69	70	76	80	87	90	90	88	77	81	74	81.8
	Minimum	67	73	64	65	52	53	55	55	64	53	57	58	61	66	50	54	56	60	66	63	64	61	61	66	68	63	65	61	61	51	53	60.2
Canoe Brook§§	Maximum	100	97	89	79	83	83	84	87	82	76	70	81	89	78	83	84	78	81	84	78	66	71	75	82	88	91	89	89	79	80	76	82.3
	Minimum	66	73	58	64	53	49	54	54	65	51	56	55	66	66	48	52	63	68	63	62	64	61	65	68	66	58	64	60	60	47	50	59.6
Elizabeth	Maximum	100	100	84	76	86	85	84	90	85	77	69	80	90	83	87	92	83	82	84	84	74	71	74	82	89	94	91	90	78	80	77	83.9
	Minimum	76	77	70	65	58	61	61	58	68	60	....	60	68	67	54	58	60	63	69	67	64	62	67	70	62	63	68	65	62	53	55	63.7[a]
Flemington	Maximum	100	99	88	79	85	90	86	89	90	78	69	84	90	82	88	85	79	87	86	85	76	72	74	80	91	96	94	88	80	84	77	84.9
	Minimum	69	75	64	65	57	60	59	58	67	57	55	58	69	67	55	57	64	62	66	64	64	62	67	69	68	64	66	65	62	54	56	62.7
Jersey City	Maximum	99	98	84	74	83	84	85	88	82	75	70	80	87	79	84	85	77	79	83	79	70	70	74	80	87	92	90	88	77	81	73	81.8
	Minimum	75	78	70	65	63	64	67	63	70	63	57	64	66	67	63	64	66	69	68	69	63	64	66	70	69	71	74	70	63	63	63	66.7
Lambertville	Maximum	97	94	84	76	83	83	83	85	84	75	67	80	88	80	72	81	82	81	81	76	71	70	73	78	85	90	89	86	78	78	77	80.9
	Minimum	70	80	65	63	58	58	63	60	64	60	56	60	62	64	53	59	63	63	70	60	62	61	66	69	67	66	68	67	60	55	55	62.8
Little Falls§§	Maximum	101	100	87	77	85	87	85	88	83	78	74	81	89	79	85	84	79	84	84	79	66	71	75	81	89	93	91	90	78	84	76	83.3
	Minimum	70	78	64	64	55	55	56	66	67	55	58	58	67	67	52	55	65	62	67	64	64	61	64	67	68	63	67	64	61	51	54	62.2
New Brunswick	Maximum	97	97	82	77	82	86	84	86	83	80	68	80	88	86	81	83	79	81	82	78	74	70	73	82	86	90	89	88	76	78	75	82.0
	Minimum	71	77	67	67	59	57	60	60	70	60	56	60	70	67	55	58	65	63	70	66	63	63	67	70	67	63	67	65	63	56	55	63.8
Paterson	Maximum	99	98	86	77	82	87	84	87	81	75	72	80	88	79	84	82	78	81	82	78	68	71	73	79	89	93	92	86	77	82	74	82.1
	Minimum	72	78	70	65	58	59	59	62	69	57	58	60	70	67	55	58	65	65	69	66	63	61	67	71	68	67	71	66	62	55	56	64.2
Plainfield	Maximum	100	99	84	74	84	85	86	88	83	76	70	81	91	80	84	84	78	79	83	77	70	70	73	80	87	91	90	88	78	80	74	82.2
	Minimum	70	76	63	65	56	58	57	57	68	58	55	58	68	66	53	56	65	61	68	64	64	62	65	69	66	64	67	63	61	53	54	62.3
Ridgefield	Maximum	99	99	83	77	80	80	85	87	81	77	68	81	87	77	83	83	78	79	84	79	66	73	75	82	88	92	90	86	76	80	72	81.5
	Minimum	70	77	67	62	56	56	58	58	68	57	58	60	65	67	54	55	60	65	69	60	63	61	64	67	67	66	69	65	61	53	56	62.4
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	95	95	84	74	81	82	82	83	79	73	70	78	82	76	82	86	77	78	83	79	69	71	75	80	87	91	89	88	74	79	72	80.5
	Minimum	75	78	71	65	64	65	68	64	70	63	58	65	66	67	64	65	66	69	67	69	63	64	66	70	69	71	74	70	63	63	64	67.0
The Southern Interior.																																	
Belleplain	Maximum	96	97	88	81	81	84	83	86	82	78	72	83	89	78	84	86	80	83	....	83	70	75	76	85	87	91	90	89	76	78	75	82.9[a]
	Minimum	80	74	70	64	55	54	54	57	67	61	64	55	61	63	53	55	65	59	....	68	66	64	69	70	70	63	65	65	64	53	50	62.6[a]
Bridgeton	Maximum	99	96	90	85	85	87	84	89	89	78	75	85	89	82	85	85	80	82	84	85	72	77	77	85	87	93	92	89	79	80	76	84.5
	Minimum	75	77	71	67	59	59	62	63	71	65	60	59	72	68	58	60	64	64	68	66	65	63	68	70	68	65	67	68	64	56	67	65.5
Burlington	Maximum	101	98	96	87	82	85	86	88	88	85	73	79	83	90	84	85	81	83	85	84	85	75	76	83	87	89	92	92	78	81	79	85.2
	Minimum	83	78	68	68	69	68	60	59	72	63	59	62	65	58	56	59	61	63	62	63	65	63	69	70	70	72	74	66	65	58	59	65.4
Camden	Maximum	100	98	89	76	81	85	86	90	85	80	70	81	92	78	86	85	82	84	88	79	70	74	74	83	89	94	90	92	79	81	76	83.9
	Minimum	76	78	72	66	62	62	61	63	68	62	58	60	69	64	58	62	67	64	68	68	63	63	69	72	66	68	69	68	64	57	57	65.3
Freehold	Maximum	99	97	85	78	80	82	84	87	87	82	67	82	89	82	82	85	80	79	78	79	70	71	73	82	86	90	90	89	78	77	76	82.1
	Minimum	71	76	66	66	56	60	56	59	70	62	57	57	68	68	56	60	66	63	67	65	64	64	68	70	69	66	66	66	63	52	55	63.6
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	99	100	85	78	84	87	88	86	84	83	70	82	92	82	86	85	81	84	83	79	74	72	73	83	86	91	90	89	78	79	76	83.5
	Minimum	70	76	64	66	57	55	58	60	69	61	57	59	70	67	54	59	66	62	69	66	64	64	68	70	69	65	67	65	63	52	54	63.4
Indian Mills	Maximum	99	97	90	80	82	85	85	88	85	81	70	83	90	79	84	86	79	82	84	81	74	72	75	85	86	84	91	90	76	81	75	83.2
	Minimum	72	75	65	67	56	56	57	57	71	62	59	56	70	68	54	58	66	62	67	67	65	63	68	70	68	64	66	65	64	55	54	63.5
Lakewood	Maximum	98	96	89	80	82	80	82	87	84	80	68	81	87	80	78	82	80	80	80	77	73	72	74	84	85	89	88	86	75	75	74	81.5
	Minimum	73	76	65	67	56	56	57	57	70	60	58	57	71	69	54	59	66	60	65	67	65	65	69	71	69	65	67	64	60	54	53	63.4
Moorestown	Maximum	96	96	87	76	82	84	85	85	85	80	69	82	90	75	83	82	80	82	85	79	69	73	73	83	87	90	89	89	77	79	75	82.2
	Minimum	75	72	67	65	60	59	60	59	66	58	58	59	68	62	58	60	64	63	68	67	63	63	69	69	68	66	67	66	61	56	56	63.6
Pemberton	Maximum	97	96	90	84	84	84	85	87	87	85	70	82	89	77	83	86	81	80	85	80	72	73	75	84	87	90	90	91	77	80	76	83.5
	Minimum	73	75	67	68	59	57	60	58	72	61	59	59	71	69	57	59	67	63	69	68	66	64	69	70	69	64	67	68	65	55	57	64.7
Pleasantville§§	Maximum	97	96	83	76	81	81	80	83	81	78	72	78	81	77	79	84	79	84	85	79	79	74	76	83	88	92	90	88	76	77	72	81.6
	Minimum	74	77	67	69	58	57	58	61	70	61	66	56	63	69	56	59	65	65	69	71	64	65	70	71	67	66	66	65	65	55	52	64.4
Runyon	Maximum	100	101	86	76	87	83	86	89	85	80	68	86	92	84	84	86	82	82	85	86	76	80	76	85	89	93	93	90	80	80	78	84.8
	Minimum	67	76	60	67	51	48	52	51	70	56	58	55	79	62	46	56	54	57	63	66	65	63	70	67	68	62	62	60	62	54	48	60.5
Trenton	Maximum	98	96	85	74	83	84	84	87	84	78	68	82	89	76	83	85	78	80	83	78	69	71	75	82	87	91	90	87	77	80	73	81.8
	Minimum	73	77	70	67	62	64	63	63	68	57	56	60	68	66	61	62	66	64	69	67	63	62	68	70	70	68	69	69	64	58	58	65.2
Tuckerton	Maximum	96	96	85	75	75	76	80	81	80	75	74	75	80	75	81	84	75	80	78	72	70	73	70	72	80	90	92	90	82	75	76	79.1
	Minimum	81	80	65	60	62	59	60	60	60	57	56	60	60	59	63	70	61	68	60	59	57	60	60	61	69	75	76	70	62	62	59	63.6
Philadelphia, Pa.	Maximum	97	97	89	77	84	86	84	86	85	79	71	82	90	78	84	83	80	83	85	80	70	74	76	82	88	93	92	89	80	82	76	83.3
	Minimum	81	80	71	69	66	67	67	67	71	62	60	64	71	70	67	69	69	68	73	70	64	64	69	71	71	72	74	71	67	63	64	68.8
The Sea Coast.																																	
Asbury Park	Maximum	86	92	82	76	79	78	77	85	80	75	70	75	76	76	77	79	76	75	76	77	71	71	74	83	88	92	87	80	80	75	72	78.7
	Minimum	75	76	73	69	63	65	66	64	71	66	61	62	72	70	60	63	68	68	71	70	67	67	67	72	70	70	71	70	70	66	60	67.6
Atlantic City	Maximum	90	90	83	77	79	78	79	80	78	77	72	78	80	78	78	82	79	79	78	78	71	73	76	80	89	92	87	86	75	77	72	79.7
	Minimum	77	74	74	69	62	64	67	71	71	69	66	61	72	69	64	68	68	70	74	70	68	68	70	73	73	72	73	73	67	62	69	69.3
Long Branch	Maximum	100	93	78	74	83	77	78	89	80	76	67	78	80	75	78	81	77	75	78	76	71	72	74	82	87	90	90	85	75	75	72	79.5
	Minimum	75	77	71	67	59	61	60	62	71	62	59	61	71	64	56	60	67	65	70	69	66	65	68	71	68	67	72	70	65	58	58	65.6
Sandy Hook	Maximum	91	97	80	75	83	77	77	85	81	75	68	80	82	75	78	84	76	75	76	78	70	73	75	82	83	90	90	85	75	76	72	79.6
	Minimum	72	78	71	67	67	69	69	66	71	65	60	66	71	70	64	66	68	70	71	69	65	66	69	71	72	71	73	72	67	65	65	68.6

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	.224	.224	.214	.112	.192	.200	.224	.144	.240	.108	.040	.072	.150	.080	.176	.086	.090	.028	.084	.088	.096	.018	*	.072	.176	.168	.192	.132	.168	.160	.072	4.030
	Wind movement	8	13	10	35	8	8	16	24	18	11	25	12	14	23	6	7	5	15	8	11	26	24	55	109	33	18	7	5	10	8	8	580
Pleasantville**	Evaporation	.304	.360	.150	.160	.288	221	.288	.234	*	.394	.160	.192	.288	.080	.160	.236	.122	.144	.042	....	....	....	....	.234	.304	.208	.160	.128	.128	.192	.160	5.840
	Wind movement	36	70	13	77	39	31	38	51	77	45	100	54	81	60	23	31	37	37	39	30	138	140	140	140	73	60	29	18	39	36	44	1826
Runyon	Evaporation	.250	.270	.210	.140	.150	.210	.210	.240	.260	.150	.120	.090	.120	.060	.170	.150	.180	.010	.090	.090	.020	.004	.020	.120	.150	.240	.240	.040	.130	.150	.150	4.434
	Wind movement	18	21	20	13	16	19	25	27	17	13	23	16	20	12	10	6	11	11	13	16	41	14	67	140	95	14	16	11	17	15	12	769

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next followin record. ** Observations taken in morning, and entered on preceding day.

N J

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.
H O. GEREN.
TRENTON, N. J.

Vol. XXXVIII. September, 1933. No. 9.

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GENERAL SUMMARY.

The month as a whole was warm and wet. The temperature ran abnormally high during the first decade and also during the last seven days of the month. In the interim, from the 11th to 23d, inclusive, small variations on both sides of the normal prevailed. The highest readings for the month were registered on the 7th, 8th, 9th and the 27th, and were mostly about the 90-degree mark. The lowest were observed variously on the 11th, 13th and 23d, and were generally in the high forties and low fifties, except in the Highlands where they ranged about ten degrees lower.

The average rainfall for the State amounted to 170% of the normal for September. In the various districts the range was from 180% along the Sea Coast section to 135% in the Southern Interior. The Highlands and Red Sandstone Plain divisions had 176% and 184%, respectively. General rains occurred during the 3d-4th, 12-16th over the southern half of the State, and 14-17th over most of the northern portion, and the 29th. Scattered and generally light to moderate showers occurred on numerous other dates. The rains over the northern half during the 14-16th totalled between four and seven inches at most stations. They resulted in flood stages in the Passaic River which were reported to be the highest in thirty years. A miscellaneous lot of damage was done but no estimate of the total amount is available.

No particular damage by high winds was reported during the month, although gale force was reached along the coast on the 9th, 16th and 17th.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 68.0°, which was 2.1° above normal. The highest temperature was 93° at Indian Mills on the 27th, and the lowest, 38°, at Layton on the 13th. The greatest daily range of temperature was 41° at Charlottcburg on the 30th. The highest monthly mean temperature was 71.6° at Atlantic City, and the lowest, 64.6° at Layton.

The temperature departure from the normal for the year 1933, to date, by sections, is: The Highlands, +2.6°; Red Sandstone Plain, +1.2°; Southern Interior, +2.3°; Sea Coast, +2.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 44 stations, was 6.07 inches, which was 2.51 inches above normal. The greatest monthly precipitation was 10.86 inches, at Little Falls, and the least, 2.70 inches at Pemberton. The greatest amount of precipitation in any 24 consecutive hours was 5.40 inches at Ridgefield on the 15th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or 2 more than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands, +7.12 inches; Red Sandstone Plain, +8.70 inches; Southern Interior, +6.98 inches; Sea Coast, +5.75 inches.

WIND.

The prevailing wind direction was from the west. The wind movement averaged 11 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 47 miles per hour from the north on the 16th at Atlantic City.

MISCELLANEOUS.

The per cent of possible sunshine was 60, or 8 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 29.94 inches, or 0.13 inch below normal. The highest reading was 30.25 inches at Camden and Trenton on the 13th, and the lowest 29.47 inches at Sandy Hook on the 20th.

The mean stage of the Delaware River at Phillipsburg was 6.0 feet, and the highest 13.6 feet on the 17th. At Trenton the mean stage was 3.4 feet, and the highest 7.4 feet on the 17th.

Thunderstorms occurred on the following dates: 3, 4, 9, 20, 27, 28 and 29. Dense fog occurred at scattered places throughout the State on the 2d and 8th and quite generally on the 25th, 26th, 27th and 29th.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	64.2	−1.7	93	38	0.83	−2.73	1.69	0.25	0	....	....	....	....
1886	66.9	+1.0	95	36	1.13	−2.43	1.76	0.86	0	....	....	....	....
1887	61.6	−4.3	90	30	3.66	+0.10	6.25	1.62	0	7	....	....	....
1888	63.1	−2.8	84	29	7.09	+3.53	10.65	3.75	0	12	....	....	....
1889	64.8	−1.1	90	34	**8.36**	+4 80	**13.13**	3.17	0	14	....	....	....
1890	64.4	−1.5	91	33	4.75	+1.19	8.61	2.59	0	10	10	10	10
1891	68.7	+2.8	95	38	2.46	−1.10	5.91	0.90	0	6	16	9	5
1892	64.2	−1.7	90	33	1.81	−1.75	3.78	1.02	0	6	15	11	4
1893	62.7	+3.2	90	31	3.20	−0.36	5.38	1.93	0	8	12	10	8
1894	68.8	+2.9	97	31	7.46	+3.90	11.65	3.69	0	8	10	10	10
1895	69.7	+3.8	**109**	29	1.07	−2.49	2.71	0.22	0	5	17	10	3
1896	65.1	−0 8	95	30	4.37	+0.81	8.74	2.26	0	5	19	7	4
1897	65.5	−0.4	99	30	1.65	−1.91	3.97	0.21	0	5	19	7	4
1898	68.6	+2.7	100	31	2.00	−1.56	3.87	0.65	0	6	17	8	5
1899	64.4	−1.5	93	30	5.88	+2.32	9.61	2.88	0	9	15	9	6
1900	69.9	+4.0	98	32	2.86	−0.70	7.37	1.09	0	6	14	10	6
1901	66.8	+0.9	94	29	3.38	−0.18	6.82	1.63	0	10	15	9	6
1902	64.6	−1.3	93	30	5.65	+2.09	8.95	3.11	0	13	11	7	12
1903	65.0	−0.9	92	29	3.34	−0.22	7.10	1.39	0	7	17	8	5
1904	64.8	−1.1	93	**23**	4.79	+1.23	10.08	0.89	0	7	14	10	6
1905	65.4	−0.5	90	28	5.23	+1.67	9.18	2.87	0	8	16	7	7
1906	68.9	+3.0	94	33	2.19	−1.37	4.66	0.75	0	7	15	9	6
1907	67.1	+1.2	92	31	8.08	+4.52	12.95	3.55	0	14	10	8	12
1908	65.7	−0.2	90	29	2.09	−1.47	4.13	0.95	0	3	11	10	9
1909	64.5	−1.4	89	30	3.30	−0.26	4.58	2.08	0	8	11	10	9
1910	67.3	+1.4	97	32	2.39	−1.17	3.97	1.01	0	6	12	10	8
1911	66.4	+0.5	90	30	2.88	−0.68	5.33	1.08	0	9	10	12	8
1912	65.9	0.0	87	28	4.47	+0.91	6.76	2.68	0	10	12	7	11
1913	64.4	−1.5	96	27	3.87	+0.31	6.55	1.56	0	9	13	8	9
1914	64.0	−1.9	99	24	**0.37**	−3.19	1.64	**0.14**	0	3	21	6	3
1915	68.5	+2.6	97	30	2.08	−1.48	4.46	0.55	0	5	17	9	4
1916	65.2	−0.7	98	31	2.84	−0 72	5.29	1.29	0	6	20	7	3
1917	**61.5**	−4.4	87	27	2.74	−0.82	6.13	0.47	0	6	16	7	7
1918	62.2	−3.7	90	29	3.84	+0.28	6.00	2.66	0	9	14	8	8
1919	65.8	−0.1	96	32	3.26	−0.30	6.28	1.04	0	8	16	6	8
1920	66.8	+0.9	90	30	3.87	+0.31	8.53	1.67	0	7	17	8	5
1921	70.2	+4.3	99	36	2.35	−1.21	5.04	0.80	0	8	15	8	7
1922	66.7	+0.8	95	27	2.26	−1.30	5.22	0.59	0	4	19	5	6
1923	67.0	+1.1	90	28	3.78	+0.22	6.26	2.24	0	7	14	8	8
1924	62.2	−3.7	99	29	5.42	+1.86	8.44	2.47	0	10	13	8	9
1925	67.8	+1 9	96	25	2.92	−0.64	5.81	0.64	0	7	11	11	8
1926	61.5	−1.4	93	32	4.18	+0.62	7.09	1.53	0	10	14	6	10
1927	65.6	−0.3	97	29	2.66	−0.90	5.03	0.65	0	5	19	6	5
1928	62.6	−3 3	90	29	4.52	+0.96	9.62	1.54	0	10	12	8	10
1929	67.0	+1.1	100	28	4.74	+1.18	8.24	2.12	0	8	14	7	9
1930	69.4	+3.5	95	32	2.14	−1.42	4.96	0.44	0	8	16	9	5
1931	**70.5**	+4.6	100	34	1.98	−1.58	3.15	0.86	0	6	19	6	5
1932	66.4	+0.5	100	27	2.29	−1.27	4.60	0.94	0	7	16	8	6
1933	68.0	+2.1	93	38	6.07	+2.51	10.86	2.70	0	10	12	9	9
Period	65.9	.... ..	109	23	3.56	....	13.13	0.14	0	8	15	8	7

W. B. O. Philadelphia 10-23-33-875.

Climatological Data for September, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	67.8[f]	+3.1	87	7†	45	13†	32[f]	6.28	+2.51	1.90	0	....	12	2	16	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	65.9	+4.0	90	10	39	13†	41	3.56	−0.86	1.80	0	6	20	5	5	ne.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	45	13†	....	8.66	+4.12	3.90	0	5	13	10	7	s.	Brice E. Riker.
Dover	Morris	600	49	65.2[b]	+3.0	84	27	44[b]	30	28	6.56	+2.47	3.20	0	9	6	15	9	......	William C. Harris
Layton	Sussex	480	32	64.6	+2.3	87	6	38	13	35	8.46	+4.54	3.37	0	10	9	8	13	sw.	A. M. Depue.
Long Valley	Morris	520	3	65.4	....	85	25†	42	30	31	7.02	....	2.37	0	9	13	6	11	nw.	S. N .Dilts.
Newton	Sussex	769	50	67.4	+3.9	87	8	43	13	38	9.36	+5.55	3.53	0	11	9	12	9	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	67.0	+1.8	89	9	46	23	32	6.64	+2.98	2.18	0	12	18	6	6	......	Town Engineer.
Sussex	Sussex	442	38	65.6[e]	+1.4	87	27	45	30	34	6.83	+2.93	3.11	0	8	14	6	10	......	A. J. W. Mowatt
Means and extremes	....	......	....	66.1	+2.8	90	10	38	13	41	7.04	+3.03	3.90	0	9	13	8	9	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	65.4	+1.8	86	7†	42	13	31	7.77	+3.64	3.75	......	9	13	4	13	ne.	John Kline.
Canoe Brook	Essex	173	3	64.8[d]	....	91	27	42	13†	32	9.66	....	3.95	......	13	16	6	8	w.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	......	......	......	......	....	10.09	+5.80	3.25	......	12	14	7	9	......	Paul Molitor. Sr.
Elizabeth	Union	45	54	68.4[c]	+1.7	91	7	48	23	31	7.19	+3.42	2.90	0	10	15	8	7	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§47	69.6	+3.3	90	7†	47	23	33	5.46	+1.56	2.49	0	11	14	10	6	w.	Hiram E. Deats.
Jersey City	Hudson	10	35	69.2	+2.0	89	27	53	16	22	8.11	+4.76	4.00	0	12	7	12	11	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	46	67.4	+1.6	87	25†	49	11†	28	4.81	+0.92	2.14	0	12	13	7	10	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	67.5	+3.4	90	27	45	13	33	10.86	+7.28	4.70	0	12	11	11	8	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	68.3	+2.7	88	27	47	23	27	5.26	+1.66	1.34	0	10	12	13	5	w.	N. J. Experiment Station
New Milford‡‡	Bergen	40	15	......	......	......	......	......	......	....	7.15	....	2.61	......	12	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	68.3	+2.1	89	27	47	13	31	8.13	+4.00	3.60	0	10	10	11	9	nw.	William H. Meyer.
Plainfield	Union	120	45	67.0	+1.4	90	27	45	23	32	6.61	+2.24	2.40	0	10	4	18	8	sw.	S. K .Pearson.
Ridgefield	Bergen	80	16	67.0	......	87	27	47	13	28	10.33	....	5.40	0	15	12	8	10	nw.	George P. Kirsten.
Somerville	Somerset	70	50	......	......	......	......	......	......	....	......	....	......	......	..	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	......	....	6.80	....	2.35	......	11	....	....	....	......	Hackensack Water Co.
New York, N. Y	....	365	63	68.8	+2.0	86	27	53	16	21	8.17	+4.78	4.50	0	15	7	10	13	nw.	U. S. Weather Bureau.
Means and extremes	....	......	....	67.5	+2.2	91	7†	42	13†	33	7.73	+3.53	5.40	0	11	11	10	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	69.8[b]	+3.3	90	9†	42	23	36	3.50	+0.11	1.00	......	8	9	12	9	sw.	A. F. Waldron.
Bridgeton	Cumberland	30	50	70.4	+2.2	92	8	49	23	30	3.95	+0.64	1.78	0	9	18	5	7	sw.	Bennett K. Matlack
Burlington	Burlington	12	§47	70.7	+3.9	91	27	54	11†	36	5.75	+2.24	1.33	0	7	15	11	4	sw.	Public Service Power Co.
Camden	Camden	20	1	70.0	....	92	27	47	23	30	2.77	....	1.15	0	11	11	12	7	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	67.5	....	90	27	49	11†	31	4.92	+0.63	1.30	0	10	19	5	6	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	......	......	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	68.5	+1.7	92	7	46	23	30	6.07	+2.94	2.18	0	13	13	13	4	w.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	69.2	+3.1	93	27	44	23	35	3.68	−0.23	1.32	0	10	5	14	11	ne.	James M. Armstrong.
Lakewood	Ocean	54	29	68.0	+3.4	88	9	47	23	29	4.76	+1.97	1.14	0	11	11	10	9	sw.	R. W. Holman.
Moorestown	Burlington	62	70	68.7	+2.7	90	9†	48	23	29	4.41	+0.78	1.05	0	13	9	12	9	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	4.15	+1.65	1.18	0	9	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	69.6	....	90	27	47	23	31	2.70	......	0.78	0	9	12	6	12	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	69.0	... ...	91	9	45	23†	40	4.17	+1.05	1.35	......	11	19	6	5	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	4.01	....	1.05	0	7	13	9	8	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	67.6	....	91	27	39	23	37	5.55	....	1.46	......	8	15	11	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	69.0	+2.1	89	27	52	23	26	4.86	+1.46	1.55	0	13	5	14	11	w.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	......	......	......	....	5.19	....	1.22	0	9	...	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	68.0	+1.8	83	6†	54	12	25	3.36	+0.30	0.81	0	11	15	9	6	nw.	John H. Brown.
Philadelphia, Pa	....	114	62	71.2	+3.2	91	25	55	16	22	4.17	+1.03	1.25	0	11	7	12	11	w.	U. S. Weather Bureau.
Means and extremes	....	......	....	69.0	+2.7	93	27	39	23	40	4.34	+1.13	2.18	0	10	13	10	7	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	69.6	+2.8	90	27	52	23	25	6.19	+3.20	1.47	0	10	19	5	6	w.	Information Bureau.
Atlantic City	Atlantic	16	60	71.6	+4.8	91	9	52	23	23	4.71	+2.06	1.38	0	8	7	14	9	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	67.8	+1.9	90	27	50	23	25	5.79	+2.73	1.35	0	12	8	11	11	e.	William D. Martin.
Sandy Hook	Monmouth	22	35	69.4	+1.9	86	7	57	23	19	5.17	+1.74	1.65	0	12	8	12	10	w.	U. S. Weather Bureau.
Means and extremes	....	......	....	69.6	+2.8	91	9	50	23	25	5.46	+2.43	1.65	0	10	11	10	9	w.	
For the State	....	......	....	68.0	+2.1	93	27	38	13	41	6.07	+2.51	5.40	0	10	12	9	9	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for September, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.34	1.90										.61	*	*	*	*	*	*	2.90	T.	T.	.35		T.			.18			6.28
Charlotteburg	Passaic			.13	1.80										.75	.43	.43											.02					3.56
Culvers Lake	Delaware				T.	3.90				.05					1.07	2.50	1.14					T.						T.					8.66
Dover	Passaic			.37	1.30					.03					.95	3.20	.30		T.			.05		.10						.26			6.56
Layton	Delaware			.07	3.37					.03					.36	2.90	1.62	T.				.03					.04	.02		.02			8.46
Long Valley	Morris			.23	1.61										2.05	2.37	.22	.08				.08			.34		T.		.04				7.02
Newton	Delaware	.02		.10	3.53										1.20	3.47	.85				.04	.06		.02	.05		.02						9.36
Phillipsburg	...do	T.		.34	1.12							T	.03	T.	2.02	2.18	.24				.03	.04	T.	.13	.19		T.	T.	.04	.28			6.64
Sussex	Hudson			.02	3.11					.41					1.17	1.18	.86					.04		.04									6.83
The Red Sandstone Plain.																																	
Boonton ‖	Passaic				1.59	.27									.24	3.75	1.25	.43		T.			T.		.05				.01	.18			7.77
Canoe Brook ‖	Essex		.02	.09	1.77	.35					.16		T.		.84	3.95	1.76	.13					.08		.23				.15	.13			9.66
Chatham ‖	...do			.20	1.55	.42					.19				.42	3.05	3.25	.21					.23		.20			T.	.23	.14			10.09
Elizabeth	Coast			.59	1.19					.26			T.	T.	1.13	2.90	.51					.05	T.	T.	.27				.04	.25			7.19
Flemington	Raritan	.01		.10	.88								.02		1.11	2.49	.12				T.	.04		T.	.36		T.	T.	.11	.22			5.46
Jersey City	Coast	.01		.25	1.50					.20		T.	T.		1.34	4.00	.41	.01	T		T.	.03		T.	.12		T.	T.	.03	.21			8.11
Lambertville	Delaware			.04	.62								.02	.02	2.14	.02	.07					.02		T.	.31		.02		.03	.30			4.81
Little Falls ‖	Passaic	T.			2.09	.66					.68		T.		.38	4.70	1.75	.30					.03		.04			.02	.08	.13			10.86
New Brunswick	Raritan	T.		.57	.92	T.								T.	1.31	1.34	.09	T.	T.		T	.01			.30	T.	.01		.08	.63			5.26
New Milford ‖	Hackensack				1.60	.32					.38				.42	2.61	1.40	.11					.05		.05			.01	.09	.11			7.15
Paterson	Passaic	T.		1.10	1.00					.70		T.			1.05	3.60	.49	.03				T.		T.	.03				.03	.10			8.13
Plainfield	Raritan			.60	1.48							T			1.38	2.40	.15	.02			T.	.04		T.	.26		T.	T.	.05	.23			6.61
Ridgefield**	Hackensack	.02		.33	1.49					.28		.01			1.98	5.40	.36	.02			T.	.04		.10	T.		.03	.03	.02	.22			10.33
Somerville	Raritan																																......
Woodcliff Lake ‖	Hackensack				1.60	.31					.41				.21	2.35	1.53	.14					.03		.05				.09	.08			6.80
New York, N. Y***	Coast	.01		.28	1.38					.22		T.	T.	.08	2.06	3.50	.26	.01	T.		T.	.03		.05	.06		T.	.01	.02	.20			8.17
The Southern Interior.																																	
Belleplain	Tuckahoe		1.00	.12	.65								T.	.07	.05		.66	.48												.47			3.50
Bridgeton	Delaware		.53	1.78	.28								.57		.53	.07	.09			.05							.05						3.95
Burlington	Delaware			.80	1.20								.26		1.33	.76						T.							.45	.95			5.75
Camden***	...do	.17		T.	.03							.12	.16	.27	.75	.48	.07				.01	T.		.06			T.		T.	.65			2.77
Freehold	Raritan		.06		1.30								.12	.03	1.04	.84	.41					T.			.20		T.		.17	.75			4.92
Hammonton	Mullica																																......
Hightstown	Raritan		.07	.58	.61								.14	.02	2.18	.62	.10				.02	.02			.25		T.		.58	.88			6.07
Indian Mills	Mullica			.44	.34								.43	.04	.48	.11	.45	.04			.03						T.			1.32			3.68
Lakewood	Metedeconk		.10	.01	1.14								.22	.02	.40	.65	.77	.40				T.			.15		T.		T.	.90			4.76
Moorestown ‖	Delaware		.01		1.05	.10					.08		.34	.05	.36	.96	.57				.02		.02		.09					.76			4.41
Northfield	Coast		.25		.44								.45		.10	.40	.68	1.18			.02									.65			4.15
Pemberton	Delaware			.21	.44								.26		.45	.38	.10				T.	T.			.08		T.		.01	.77			2.70
Pleasantville ‖	Coast		.30			.30							.41	.04		.22	.83	1.35			.01	T.				.01				.65	.05		4.17
Port Norris	Maurice			.33	.85								.45	.53			.52				.28									1.05			4.01
Runyon	Coast			.22	1.20										1.46	1.32	.10								.32				.37	.56			5.55
Trenton***	Delaware			.09	.73	T.						.02	.09	.52	1.05	.71	.09	T.			.01	T.		.17	.05		T.	T.	.60	.73			4.86
Trenton No. 2‖	...do				.62	.24							.11		1.22	.83	.53	T.			T.		T.		.26		T	T.	.57	.81			5.19
Tuckerton	Coast					.42							.40	.11	.38	.27	.62	.21				.04			.08	.02				.81			3.36
Phila., Pa***	Delaware	.09		T		.65						.09	.17	.21	1.06	.99	.06				.01	T.		.06	T.		T.			.78			4.17
The Sea Coast.																																	
Asbury Park	Coast		T.	.03	1.44							T.	.05	T.	.77	1.30	1.07	.60					T		.15				.03	.75			6.19
Atlantic City***	...do		.15		1.06								.45		T.	.76	1.07	.37			.01			T.			T.		T.	.84			4.71
Long Branch**	...do	T		.07	1.10								.04	.10	1.34	1.35	.68	.36			T.	T.		.17	.04		T.		.01	.53			5.79
Sandy Hook***	...do			.06	.95							T.	T.	.06	1.59	1.25	.24	.17	T.		T.	T.	T.	.25	.02		T.	.04	.21	.33			5.17

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	29.94	30.22	3	29.53	20	15.3	47	n.	16	85	70	78	61
Camden	29.94	30.25	13	29.48	20	7.9	22	nw.	10	84	59	75	.....
Long Branch	29.91	30.22	3	29.48	20	.....	.....	.....	.....	83	68	74	60
New York, N. Y	29.93	30.21	13	29.49	20	12.8	44	nw.	9	80	64	70	57
Philadelphia, Pa	29.95	30.25	13	29.52	20	11.8	29	ne.	16	80	59	68	55
Ridgefield	29.93	30.20	13	29.48	20	.....	.....	.....	.....	.....	.....	.....	.....
Sandy Hook	29.93	30.24	13	29.47	20	13.2	38	e.	17	82	75	81	53
Trenton	29.93	30.25	13	29.49	20	8.7	26	sw.	28	82	62	75	67

Daily Temperatures for September, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	79	83	75	78	80	86	87	87	85	79	76	75	72	62	....	....	....	....	....	....	68	74	70	81	86	84	86	78	77	78	....	78.6[f]
	Minimum	61	55	67	69	67	55	64	60	69	82	48	53	40	55	....	....	....	....	....	....	49	52	45	60	60	61	65	68	55	46	....	57.1[f]
Charlotteburg	Maximum	79	75	82	75	78	84	84	84	83	90	72	75	73	67	54	54	80	89	75	79	79	68	69	80	85	79	86	80	80	80	....	77.3
	Minimum	56	61	48	67	58	53	67	55	68	62	43	41	39	62	44	53	65	62	66	55	49	54	44	63	54	54	68	58	46	39	....	54.5
Dover	Maximum	74	79	71	76	77	82	82	81	83	75	68	70	65	60	64	68	78	76	71	78	68	68	66	75	81	79	84	81	71	71	....	73.7
	Minimum	60	53	56	69	56	55	66	58	67	59	....	60	....	53	58	51	58	59	53	57	53	55	46	52	63	68	64	68	54	44	....	56.6[b]
Layton	Maximum	80	82	73	80	81	87	84	85	82	76	69	74	73	62	55	57	84	71	74	82	69	65	66	80	84	80	85	78	74	74	....	76.5
	Minimum	57	53	64	68	52	52	67	58	69	52	40	44	38	53	52	50	53	50	47	58	55	50	44	57	59	57	64	56	52	43	....	53.8
Long Valley	Maximum	76	80	80	77	79	84	84	83	84	78	72	73	68	68	52	63	83	76	73	79	64	70	68	78	85	82	85	76	74	73	....	75.6
	Minimum	58	58	65	68	55	54	62	58	69	61	45	53	58	52	46	51	57	53	61	52	61	53	43	57	57	57	60	55	51	42	....	55.1
Newton	Maximum	83	81	84	80	78	85	86	87	85	78	73	82	78	77	69	76	83	80	78	80	66	83	83	79	85	82	85	77	75	80	....	79.9
	Minimum	57	55	67	65	56	55	64	60	69	58	45	48	43	51	50	50	53	53	55	58	52	50	45	66	60	50	65	56	53	46	....	54.8
Phillipsburg	Maximum	76	82	75	78	82	87	87	86	89	81	72	75	67	61	56	61	84	77	78	82	66	70	68	81	85	84	87	77	76	76	....	76.9
	Minimum	63	56	67	70	58	55	62	59	68	62	48	53	50	55	54	53	68	55	53	57	54	55	46	60	60	62	65	58	50	48	....	57.1
Sussex	Maximum	....	83	82	78	81	79	80	82	81	78	74	75	67	66	55	56	83	76	72	81	62	67	63	76	78	78	87	83	79	79	....	75.2[a]
	Minimum	....	49	57	69	57	55	65	60	70	63	46	47	52	54	52	50	55	54	63	60	....	....	....	....	68	61	66	58	56	45	....	66.1[e]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	78	80	74	79	80	84	86	85	85	80	70	74	69	57	56	62	84	74	74	79	67	72	71	80	86	82	85	79	75	74	....	76.0
	Minimum	57	54	56	67	57	53	61	59	62	66	50	52	42	49	53	62	53	53	51	57	51	55	44	49	66	68	63	61	66	44	....	54.7
Canoe Brook§§	Maximum	78	81	74	74	...	....	....	....	86	78	71	74	70	58	62	65	85	75	74	82	66	72	72	80	87	80	91	76	76	75	....	76.6[d]
	Minimum	57	56	61	67	68	....	....	....	....	59	43	54	42	53	51	52	54	54	50	56	47	52	42	57	57	58	60	61	54	43	....	54.2[d]
Elizabeth	Maximum	78	80	78	77	83	88	91	85	86	80	75	76	74	65	58	63	84	79	80	84	80	82	72	81	88	81	89	89	77	76	....	79.3
	Minimum	58	59	64	69	57	57	61	64	72	66	51	57	49	55	53	53	59	55	53	55	63	55	48	....	....	61	....	64	52	49	....	67.4[e]
Flemington	Maximum	83	85	80	80	85	89	90	90	88	82	73	80	80	66	56	61	90	80	81	85	74	76	70	87	89	87	89	83	81	81	....	80.7
	Minimum	61	60	65	70	61	57	62	62	72	66	49	56	50	55	54	53	60	65	53	61	55	56	47	60	60	62	63	61	57	48	....	58.4
Jersey City	Maximum	77	80	75	77	82	86	87	86	87	79	73	75	71	62	60	63	80	76	75	82	70	73	70	81	87	78	89	77	77	76	....	77.0
	Minimum	63	64	67	68	64	64	65	66	69	67	54	58	57	56	55	53	59	60	56	66	56	58	54	62	65	65	68	63	60	61	....	61.4
Lambertville	Maximum	78	82	76	78	78	85	86	86	85	77	72	74	68	60	56	60	82	76	74	81	68	69	70	80	87	85	87	78	74	77	....	76.3
	Minimum	60	61	65	67	62	61	63	63	71	64	49	54	61	54	53	52	59	58	53	63	55	55	49	60	64	63	65	61	54	49	....	68.6
Little Falls§§	Maximum	81	84	75	80	82	88	89	86	87	80	75	77	73	59	57	62	85	77	77	83	69	74	72	83	88	81	90	80	78	78	...	78.3
	Minimum	60	68	62	68	56	55	65	60	67	64	48	53	45	54	52	63	54	56	51	53	53	66	48	58	58	59	63	62	57	47	....	66.7
New Brunswick	Maximum	78	81	80	78	80	85	87	82	87	84	74	75	72	68	58	62	84	79	75	82	80	70	70	80	85	83	88	84	75	74	....	78.0
	Minimum	61	61	63	70	60	58	61	64	70	67	50	55	51	54	54	54	60	57	55	61	53	55	47	61	61	62	64	64	57	49	....	68.6
Paterson	Maximum	81	81	73	78	81	87	86	85	86	87	79	78	72	65	66	61	81	77	76	82	74	73	69	82	85	78	89	81	78	76	....	77.9
	Minimum	62	59	67	70	61	58	66	62	71	64	48	61	47	54	52	52	58	59	53	60	53	57	50	61	59	62	65	64	57	49	....	58.7
Plainfield	Maximum	78	80	76	77	82	87	88	84	87	80	74	76	68	57	56	63	85	76	76	83	70	74	70	81	87	84	90	77	77	77	....	77.3
	Minimum	58	57	63	57	56	55	61	62	70	67	48	55	47	53	53	52	60	55	55	59	53	55	45	60	59	60	63	62	55	47	....	56.7
Ridgefield	Maximum	77	72	75	81	82	85	84	84	84	77	70	74	70	61	58	63	80	76	74	81	68	72	70	81	85	74	87	76	76	76	....	75.8
	Minimum	66	60	65	67	60	57	65	65	70	62	51	55	47	55	52	50	55	57	53	62	65	65	48	58	62	65	65	62	56	66	....	58.2
Somerville	Maximum	....	....	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	77	80	75	77	81	84	86	84	86	76	70	74	71	62	60	63	78	76	74	80	67	71	70	81	85	75	86	77	76	74	....	75.9
	Minimum	64	64	68	69	64	65	65	67	68	63	55	59	58	56	55	53	57	61	56	67	57	58	55	63	66	65	69	64	60	61	....	61.7
The Southern Interior.																																	
Belleplain	Maximum	79	81	83	83	78	85	88	88	90	80	77	73	73	74	....	68	83	....	81	84	68	70	78	85	89	83	90	79	75	78	....	80.1[b]
	Minimum	59	62	63	71	64	55	62	66	73	63	50	57	54	60	....	62	60	....	54	64	48	54	42	61	62	62	67	67	57	45	....	59.4[b]
Bridgeton	Maximum	81	83	81	82	79	87	89	92	89	84	76	73	73	70	67	66	84	80	80	85	79	73	78	86	91	83	91	78	76	80	....	80.5
	Minimum	61	64	65	70	64	59	62	67	72	65	53	57	58	56	60	58	61	60	65	64	54	53	49	62	62	65	66	66	54	50	....	60.4
Burlington	Maximum	78	84	83	80	81	87	89	89	88	89	90	73	75	69	60	75	79	84	79	85	83	73	75	77	90	88	91	85	76	79	....	81.1
	Minimum	62	64	66	65	65	58	63	67	65	69	54	57	58	67	57	57	57	59	64	64	54	58	59	68	57	61	65	65	57	57	....	60.3
Camden	Maximum	79	85	80	81	80	88	91	88	91	81	78	71	69	62	62	62	85	81	78	86	69	72	74	84	90	89	92	79	75	80	....	79.4
	Minimum	64	65	64	72	64	59	63	67	73	62	56	57	55	57	57	55	62	60	56	65	58	58	47	58	64	64	66	65	56	50	....	60.6
Frechold	Maximum	73	79	82	78	79	85	86	83	89	83	73	74	71	68	59	63	83	78	75	83	70	71	73	80	86	85	90	81	70	64	....	77.1
	Minimum	60	60	66	63	61	57	62	67	67	60	49	55	51	55	66	56	59	60	66	55	55	55	49	49	56	62	65	66	55	50	....	57.9
Hammonton	Maximum	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	78	83	82	78	79	86	92	86	88	82	74	74	74	67	60	62	84	77	76	84	73	71	72	80	87	86	90	80	75	78	....	78.6
	Minimum	60	60	64	70	60	58	62	65	71	65	48	55	50	54	55	54	59	57	53	62	53	56	46	61	61	60	66	64	56	48	....	58.4
Indian Mills	Maximum	80	85	79	79	78	88	91	89	91	82	77	70	71	68	64	64	82	78	77	86	78	70	78	84	90	89	93	81	75	80	....	79.9
	Minimum	60	61	63	69	63	55	63	65	72	68	48	57	53	56	60	58	60	67	52	52	50	52	44	61	60	63	65	67	56	45	....	58.5
Lakewood	Maximum	75	78	80	76	77	84	85	81	88	83	73	68	70	67	62	65	80	78	74	81	73	70	72	78	82	82	87	79	75	70	....	76.4
	Minimum	62	59	62	70	60	55	64	69	72	65	49	56	63	57	59	58	60	57	54	60	51	65	47	62	60	62	66	69	57	48	....	69.6
Moorestown	Maximum	78	82	80	79	79	86	89	88	90	79	75	72	69	62	62	62	83	79	76	84	67	73	73	83	89	87	90	77	75	78	....	78.2
	Minimum	62	64	63	70	61	58	61	66	72	57	53	58	56	56	66	55	62	68	55	62	54	55	48	60	63	63	66	61	53	49	....	59.2
Pemberton	Maximum	78	83	83	77	77	85	86	86	88	86	78	71	71	70	63	62	82	79	77	83	83	70	74	83	87	86	90	86	75	78	....	79.2
	Minimum	61	63	65	70	62	56	62	67	72	69	61	57	56	57	60	68	61	59	56	62	52	56	47	63	61	62	61	68	67	48	....	60.0
Pleasantville§§	Maximum	77	77	78	81	79	85	88	83	91	80	74	70	73	72	66	67	83	80	78	84	69	72	74	85	87	83	86	80	76	74	....	78.4
	Minimum	60	64	69	72	64	57	62	66	69	69	49	59	54	59	63	63	61	59	54	59	61	53	45	45	62	61	69	66	68	47	....	59.6
Runyon	Maximum	79	92	81	78	81	88	89	84	89	82	76	77	72	70	58	62	87	89	83	85	78	76	74	84	89	87	91	84	76	78	....	80.3
	Minimum	62	67	58	58	53	51	57	62	73	67	40	67	43	54	56	53	60	53	50	67	47	66	39	67	57	57	62	62	48	42	....	54.9
Trenton	Maximum	78	82	77	79	80	87	87	88	88	79	72	73	70	60	59	62	83	77	75	84	67	70	71	81	89	86	89	76	74	76	....	77.3
	Minimum	62	64	66	71	64	61	62	66	72	62	55	55	57	55	66	54	61	59	57	62	58	58	52	62	64	64	68	64	57	54	....	60.7
Tuckerton	Maximum	75	75	74	75	82	83	76	79	76	76	72	71	70	70	72	68	72	70	83	73	70	75	75	72	80	82	80	82	80	79	....	75.6
	Minimum	61	63	61	59	63	71	62	68	60	59	55	54	59	55	56	55	56	57	58	60	57	59	61	69	61	73	60	70	69	58	....	60.6
Philadelphia, Pa	Maximum	77	83	79	82	80	86	88	88	90	79	74	73	71	63	61	63	84	79	78	85	69	70	72	85	91	85	88	77	76	78	....	78.6
	Minimum	66	68	68	72	70	67	67	70	74	67	60	58	60	57	67	65	62	63	61	67	62	69	66	64	69	69	70	66	57	60	....	64.0
The Sea Coast.																																	
Asbury Park	Maximum	76	77	76	77	80	87	87	76	89	80	70	68	69	68	64	66	83	78	75	83	71	71	74	79	78	74	90	78	75	71	....	76.3
	Minimum	65	65	69	73	65	62	65	71	73	68	55	59	58	59	61	60	61	62	57	66	58	58	52	54	65	67	70	69	59	67	.. .	62.8
Atlantic City	Maximum	76	77	78	81	81	82	87	80	91	83	74	69	72	72	67	68	84	82	79	85	68	72	73	85	85	80	80	81	77	73	....	78.1
	Minimum	64	66	71	72	68	65	71	71	75	67	60	61	61	64	64	66	61	64	59	67	59	57	52	67	68	70	72	70	60	58	....	65.0
Long Branch	Maximum	74	76	79	76	78	84	85	78	88	78	72	69	68	62	61	64	81	78	75	83	68	70	71	78	79	76	90	75	76	71	....	75.4
	Minimum	65	61	65	70	62	69	65	69	72	61	51	56	63	57	67	58	60	60	55	62	55	56	50	64	62	62	69	64	58	51	....	60.3
Sandy Hook	Maximum	75	76	76	76	78	85	86	77	85	78	72	73	68	62	60	65	77	74	73	80	66	71	71	78	82	77	85	73	74	70	....	74.8
	Minimum	67	66	70	70	67	66	68	68	72	65	59	59	61	58	57	58	61	64	60	66	61	60	67	65	66	66	69	68	60	62	....	63.9

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	.084	.106	...	....	....	. ..	....	.264	.120	.208	.112	.168	.056	....	....	....	.088	.112	.120	.128	.048	.176	.038	.096	.120	.088	.142	.106	.136	.112	....	2.628
	Wind movement	8	4	...	....	....	....	....	...	48	17	25	9	8	7	16	64	23	12	21	20	16	20	29	6	6	6	10	12	6	10	....	434
Pleasantville**	Evaporation	.108	.096	.128	.076	.144	192	.192	.128	.240	.224	.186	.040	.080	.044	.030	*	.128	.272	.218	.176	.128	.112	.048	.154	.160	.080	.160	.170	.178	.128	....	4.020
	Wind movement	63	40	76	47	38	25	52	63	51	46	45	46	28	30	59	103	132	72	74	75	36	74	39	97	6	17	1	59	30	30	....	1543
Runyon	Evaporation	.080	.120	.020	.000	.120	.180	.180	.120	.120	.180	.150	.120	.080	.116	.012	.000	.060	.120	.120	.140	.110	.120	.120	.020	.180	.080	.120	.082	.208	.120	....	3.198
	Wind movement	11	8	18	22	9	21	19	26	36	10	10	12	12	18	80	70	61	16	30	34	13	38	10	10	13	7	7	9	8	7	....	635

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

Vol. XXXVIII. October, 1933. No. 10.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

There were no outstanding weather characteristics during October. The month averaged a little below the normal in temperature and was relatively dry, the average rainfall being sixty per cent of the normal for the State as a whole. The highest temperatures registered were close to the eighty-degree mark, and occurred mostly on the 1st, while the lowest were in the twenties and were registered on the 26th and 29th. The variations on both sides of the normal were frequent but not wide, except for the cool period from the 24th to 29th, inclusive. A general killing frost occurred on the 25th and 26th and for most of the stations this was the first killing of the season, but an earlier one on the 14th was reported from some northern districts.

The rainfall amounted to about 68% of the normal over the Highlands and Kittatinny Valley, 60% over the Red Sandstone Plain, 42% over the southern Interior, and 41% in the Seacoast section. General rains occurred over the northern half on the 2d, and over most of the State, except in the Highlands and Kittatinny Valley, on the 5th. There were also somewhat general, and light, rains on the 13th. On the 17th they were moderately heavy in the southern portion and heavy in the north, with another period of more or less general light to moderate amounts from the 23d to 25th. No snow was recorded, except a few traces in the Highlands on the 25th.

There were no destructive wind storms reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 53.6°, which was 1.1° below normal. The highest temperature was 84° at Bridgeton on the 1st, and the lowest, 18°, at Runyon on the 29th. The greatest daily range of temperature was 48° at Runyon on the 31st. The highest monthly mean temperature was 59.9° at Tuckerton, and the lowest, 48.4° at Runyon.

The temperature departure from the normal for the year 1933, to date, by sections, is: The Highlands, +2.3°; Red Sandstone Plain, +0.9°; Southern Interior, +1.8°; Sea Coast, +2.5°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 2.04 inches, which was 1.37 inches below normal. The average total snowfall at 20 selected stations was a trace. The greatest monthly precipitation was 3.37 inches at Culvers Lake, and the least, 0.85 inch at Bridgeton. The greatest amount of precipitation in any 24 consecutive hours was 2.20 inches at Culvers Lake on the 17th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 6, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands. +6.39 inches; Red Sandstone Plain, +7.09 inches; Southern Interior, +5.03 inches; Sea Coast, +2.57 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 11 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 46 miles per hour from the northwest on the 25th at Sandy Hook.

MISCELLANEOUS.

The per cent of possible sunshine was 70, or 7 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.12 inches, or 0.05 inch above normal. The highest reading was 30.58 at Camden, Trenton and Sandy Hook on the 21st, and the lowest 29.54 inches at Long Branch on the 7th.

The mean stage of the Delaware River at Phillipsburg was 2.6 feet, and the highest 3.0 feet on the 1st and 17th. At Trenton the mean stage was 1.6 feet, and the highest 3.0 feet on the 27th.

A thunderstorm occurred on either the 1st or 2d in the northern part of the State. Dense fog occurred in seattered sections of the northern half on the 1st and 28th, on the 8th, 22d, 24th and 31st in the southern portion, and on the 9th, 27th and 28th along sections of the Seaboard. Killing frost occurred on either the 14th or the 26th in the northern sections and on the 25th or 26th in the southern portion.

ERRATA.

Annual 1932: State mean, April should be 48.3°, departure −1.1°: State annual mean should be 53.4°. August 1933: Long Branch, Number of days with .01 or more should be 16. September 1933; Monthly precipitation should be 4.17 inches, departure +1.67.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	54.2	−0.5	82	29	4.20	+0.79	5.85	2.91	0	....	....	....	....
1886	55.6	+0.9	88	21	3.22	−0.19	8.16	2.02	0	....	....	....	....
1887	52.3	−2.4	89	21	2.61	−0.80	5.00	1.58	0	7	....	....	....
1888	49.2	−5.5	73	25	4.73	+1.32	7.00	2.97	0	12	....	....	....
1889	50.8	−3.9	82	23	3.80	+0.39	5.03	2.42	0	11	....	....	....
1890	53.9	−0.8	81	24	6.33	+2.92	10.18	3.40	0	13	9	8	14
1891	52.8	−1.9	92	18	3.44	+0.03	5.57	1.88	0	8	11	11	9
1892	53.6	−1.1	85	21	0.52	−2.89	1.09	0.04	0	4	14	12	5
1893	55.2	+0.5	85	17	4.22	+0.81	6.59	1.74	0	7	15	7	9
1894	55.3	+0.6	87	27	5.67	+2.26	8.23	3.90	0	10	12	7	12
1895	49.9	−4.8	83	18	3.60	+0.19	5.53	1.62	0	5	19	7	5
1896	51.5	−3.2	82	21	2.24	−1.17	4.58	1.72	0	8	11	8	12
1897	55.8	+1.1	**95**	22	2.43	−0.98	6.49	0.87	0	7	14	8	9
1898	56.5	+1.8	88	24	5.76	+2.35	8.42	3.92	0	10	13	9	9
1899	56.6	+1.9	86	18	2.72	−0.69	4.65	1.07	0	6	13	10	8
1900	**59.9**	+5.2	92	19	3.70	+0.29	6.59	1.47	0	10	10	8	13
1901	54.4	−0.3	82	21	1.93	−1.48	4.45	0.87	0	4	17	8	6
1902	56.0	+1.3	80	20	6.39	+2.98	9.35	3.82	0	8	15	7	9
1903	55.9	+1.2	86	24	**8.92**	+5.51	**16.19**	4.17	0	8	13	9	9
1904	51.9	−2.8	89	15	3.78	+0.37	7.01	1.50	0	5	20	6	5
1905	55.5	+0.8	90	17	2.71	−0.70	4.83	0.75	0	7	18	7	6
1906	55.0	+0.3	80	**11**	4.46	+1.05	7.14	2.66	0	11	8	9	14
1907	50.6	−4.1	80	18	4.46	+1.05	7.18	2.70	0	7	22	5	4
1908	57.3	+2.6	92	19	2.71	−0.70	5.14	1.30	0	8	15	5	11
1909	51.2	−3.5	84	18	1.18	−2.23	1.82	0.40	0	8	17	7	7
1910	57.2	+2.5	90	18	3.15	−0.26	5.55	1.55	0	7	15	8	8
1911	53.9	−0.8	80	18	5.49	+2.08	8.23	2.61	0	12	10	9	12
1912	57.0	+2.3	88	25	3.30	−0.11	6.95	1.72	0	5	17	8	6
1913	57.8	+3.1	83	25	7.79	+4.38	13.84	2.70	0	11	12	9	10
1914	58.1	+3.4	88	19	1.99	−1.42	3.08	0.90	0	5	13	9	9
1915	56.2	+1.5	84	23	3.03	−0.38	5.18	1.89	0	9	17	7	7
1916	55.1	+0.4	92	23	1.37	−2.04	2.38	0.51	0	4	18	8	5
1917	50.7	−4.0	84	22	6.99	+3.58	9.74	4.28	0	10	15	8	8
1918	57.0	+2.3	84	22	1.25	−2.16	2.36	0.74	0	8	16	9	6
1919	59.0	+4.3	92	25	3.43	+0.02	4.97	2.01	0	13	9	8	14
1920	59.0	+4.3	87	28	1.80	−1 61	4.53	0.55	0	5	20	5	6
1921	54.1	−0.6	82	16	0.97	−2.44	2.18	0.33	0	5	18	7	6
1922	56.6	+1.9	92	18	1.48	−1.93	2.70	0.55	0	7	19	6	6
1923	53.9	−0.8	81	21	4.25	+0.84	6.37	2.35	0	8	16	8	7
1924	54.4	−0.3	84	16	**0.31**	−3.10	2.76	**T.**	0	1	23	6	2
1925	**49.1**	−5.6	84	12	4.59	+1.08	5.78	3.38	0	11	9	9	13
1926	53.1	−1.6	90	17	4.08	+0.67	6.03	1.79	0	11	13	8	10
1927	56.8	+2 1	94	23	7.82	+4.41	14.07	2.81	0	10	18	5	8
1928	56.1	+1.4	90	16	1.19	−2.22	2.58	0.24	0	6	17	9	5
1929	52.3	−2.4	80	17	4.61	+1.20	7.35	2.62	0	8	15	8	8
1930	52.6	−2.1	89	12	1.95	+1.46	3.70	0.93	0	6	17	7	7
1931	58.3	+3.6	92	24	2.76	−0.65	4.69	1.67	0	8	17	7	7
1932	56.2	+1.5	89	21	5.85	+2.44	9.64	3.53	0	10	13	6	12
1933	53.6	−1.1	84	18	2.04	−1.37	3.37	0.85	T.	6	18	7	6
Period	54.7	....	95	11	3.41	....	16.19	T.	0	8	15	8	8

W. B. O. Philadelphia-11-23-33-875.

Climatological Data for October, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	53.6	−0.2	82	1	25	26†	44	2.26	−1.41	1.28	0	6	19	4	8	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	49.9	−1.7	80	1	22	29	43	2.30	−2.17	0.94	0	8	17	10	4	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	25	26	....	3.37	−0.81	2.20	T.	5	23	5	3	nw.	Brice E. Riker.
Dover	Morris	600	49	50.4	−0.9	76	1	25	29	40	2.37	−1.70	1.00	T.	6	6	23	2	......	William C. Harris
Layton	Sussex	480	32	50.2	−1.3	78	1†	20	29	46	3.02	−0.60	1.67	T.	5	13	5	13	ne.	A. M. Depue.
Long Valley	Morris	520	3	51.3	......	78	1	23	26	45	2.62	......	1.30	T.	5	20	10	1	w.	S. N .Dilts.
Newton	Sussex	769	50	51.7	−1.0	83	1†	24	29	39	2.82	−0.81	1.60	T.	6	12	10	9	n.	Irving J. Kern.
Phillipsburg	Warren	363	§50	51.9	−2.0	79	1	28	26	39	1.99	−1.57	1.03	0	5	19	8	4	......	Town Engineer.
Sussex	Sussex	442	38	53.4^a	+0.2	82	1	24	29	40	2.66	−0.78	1.19	T.	5	20	8	3	......	A. J. W. Mowatt
Means and extremes	......	......	....	51.6	−1.0	83	1†	20	29	46	2.60	−1.23	2.20	T.	6	17	9	5	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	51.0	−1.8	78	31	26	29†	43	3.30	−0.61	1.39	......	6	17	3	11	ne.	John Kline.
Canoe Brook	Essex	173	3	51.2	......	80	1	20	29	47	1.91	......	0.70	......	8	17	7	7	w.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	......	......	......	......	....	2.37	−1.84	0.81	......	9	18	7	6	......	Paul Molitor. Sr.
Elizabeth	Union	45	54	54.8^b	−0.6	80	1	28	26	38	1.25	−2.64	0.43	0	5	20	6	5	ne.	Union County Park Comm.
Flemington	Hunterdon	140	§47	54.2	−1.8	82	1	25	26	43	2.44	−1.22	1.03	0	7	21	5	5	w.	Hiram E. Deats.
Jersey City	Hudson	10	35	56.0	−0.3	79	1	31	26	29	2.04	−1.64	0.72	0	6	13	11	7	n.	S. K. Pearson.
Lambertville	Hunterdon	430	46	52.8	−1.8	76	31	25	26	36	2.03	−1.45	1.24	0	7	21	5	5	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	53.6	−1.3	83	1	26	29	46	3.25	−1.26	1.18	0	9	21	4	6	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	53.8	−1.0	80	1	26	26	36	1.76	−1.82	0.72	0	5	21	7	3	w.	N. J. Experiment Station
New Milford‡‡	Bergen	40	15	......	......	......	......	......	......	....	2.90	......	0.96	......	5	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	54.6	−0.6	79	31	30	26†	40	2.81	−1.28	1.16	0	7	18	6	7	nw	William H. Meyer.
Plainfield	Union	120	45	52.9	−1.3	80	1	27	26†	41	1.98	−2.17	1.05	0	7	16	8	7	n.	S. K .Pearson.
Ridgefield	Bergen	80	16	52.7	......	78	1	25	26	32	2.60	......	0.78	0	8	17	8	6	n	George P. Kirsten.
Somerville	Somerset	70	50	54.3^e	0.0	81	1	24	26†	42	1.69	−1.75	0.96	0	5	15	9	7	w.	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	......	....	2.99	......	0.93	......	6	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	63	55.9	−0.4	78	1	31	26	27	1.98	−1.55	0.70	0	6	11	11	9	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	53.5	−1.0	83	1	20	29	47	2.35	−1.61	1.39	0	7	18	7	6	w.	
The Southern Interior.																				
Belleplain	Cape May	30	39	52.6^d	−3 7	82	2	20	26	43	1.38	−2.04	0.51	0	4	14	8	9	nw.	A. F. Waldron.
Bridgeton	Cumberland	30	50	55.5^a	−1.9	84	1	25	26	35	0.85	−2.74	0.40	0	5	24	4	3	w.	Bennett K. Matlack
Burlington	Burlington	12	§47	56.4	−1.8	82	2	28	26	42	1.43	−2.22	0.80	0	5	22	4	5	n.	Public Service Power Co.
Camden	Camden	20	1	55.2	......	83	1	31	26†	38	1.59	......	0.87	0	4	18	8	5	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	54.0	......	80	1	25	26	36	2.37	−1.15	0.78	0	6	23	3	5	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown (near)	Mercer	146	40	53.7	−1.5	81	1	23	26	39	1.72	−1.99	0.72	0	4	20	6	5	nw.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	54.4	−1.1	82	1	23	26	44	1.27	−2.17	0.37	0	7	17	10	4	nw.	James M. Armstrong.
Lakewood	Ocean	54	29	52.9	−2.2	79	1	25	26	36	1.54	−2.05	0.45	0	5	20	5	6	nw	R. W. Holman.
Moorestown	Burlington	62	70	53.6	−1.1	80	1	27	26	39	1.42	−2.15	0.69	0	8	15	9	7	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	1.37	−1.41	0.50	0	5	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	3	54.6	......	82	1	26	26	40	1.36	......	0.56	0	5	20	4	7	nw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	54.4	......	78	1	24	26	38	1.48	−1.96	0.60	0	10	21	4	6	n.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	1.42	......	0.58	0	4	21	4	6	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	48.4	......	83	1	18	29	48	1.63	......	0.61	0	4	25	2	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	54.2	−1.4	80	1	29	26	35	1.30	−1.48	0.77	0	8	17	9	5	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	......	......	......	....	1.63	......	0.82	......	9	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	59.9	−3.8	80	1	31	26	31	1.45	−2.08	0.37	0	11	15	8	8	n.	John H. Brown.
Philadelphia, Pa	......	114	62	57.8	0.0	81	1	32	26	26	1.39	−1.42	0.84	0	5	18	5	8	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	54.3	−2.1	84	1	18	29	48	1.42	−1.95	0.87	0	6	19	6	6	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	56.1^a	+0.3	79	12	30	26	32	1.30	−2.41	0.28	0	6	21	5	5	nw.	Information Bureau.
Atlantic City	Atlantic	16	60	57.7	+0.8	76	1	31	26	26	1.64	−1.56	0.86	0	6	17	8	6	nw.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	53.9	−2.4	77	1	28	26	35	1.79	−2.26	0.62	0	8	17	8	6	w.	William D. Martin.
Sandy Hook	Monmouth	22	35	56.4	−0.5	78	1	34	26	24	1.28	−2.50	0.41	0	7	19	6	6	n.	U. S. Weather Bureau.
Means and extremes	......	......	....	56.0	−0.4	79	12	28	26	35	1.50	−2.18	0.86	0	7	19	7	5	nw.	
For the State	......	......	....	53.6	−1.1	84	1	18	29	48	2.04	−1.37	2.20	T.	6	18	7	6	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ª, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for October, 1933

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware		.35															1.28			.02			.12	.33	.16							2.26
Charlotteburg	Passaic		.40								.10			.03				.94						.05	.38	.20					.20		2.30
Culvers Lake	Delaware		.04															2.20						.40	.43	.30							3.37
Dover	Passaic	.74	T.			.06								.10				1.00						.03	.44	T.							2.37
Layton	Delaware		.20															1.67						.40	.65	.10							3.02
Long Valley	Morris				.78							.08						1.30							.38	.08							2.62
Newton	Delaware		.35											.06				1.60						.05	.56	.10				T.			2.82
Phillipsburg	....do	.44	T.						T.					.05				1.03	T.					.08	.39	T.				T.			1.99
Sussex	Hudson		.41															1.19						.18	.31	.57							2.66
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic		1.39			T.	.14							.12				T.	.86					.02		.77							3.30
Canoe Brook ‖‖	Essex		.30			.06	.14							.14					.70					.02	.09	.46							1.91
Chatham ‖	....do		.38			.05	.18							.12	.09			T.	.81					.07	.05	.62			T.				2.37
Elizabeth	Coast					.25								.27				.30			T.				.34	.09							1.25
Flemington	Raritan		.61			.07								.19				1.03	T.					.03	.44	.07							2.44
Jersey City	Coast	.04				.52								.25				.72			T.			.01	.50			T.		T.			2.04
Lambertville	Delaware	.06			.05								.28					1.24	T					.03	.32	.05							2.03
Little Falls ‖‖	Passaic		1.18			.02	.18							.17				.01	.85					.03		.80			.01				3.25
New Bruuswick	Raritan		T.			.28	T.		T.					.27				.72	T.					T.	.45	.04							1.76
New Milford ‖‖	Hackensack		.56				.35							.17					.96							.86							2.90
Paterson	Passaic		1.16			.01								.13				.75						.06	.66	.04		T.		T.			2.81
Plainfield	Raritan	.10				.20								.25				1.05					T.	.02	.34	.02		T.		T.			1.98
Ridgefield**	Hackensack	.42				.57							T.	.22				.78			T.			.01	.55			.03		.02			2.60
Somerville	Raritan		.02			.11								.22				.96							.38	T.							1.69
Woodcliff Lake ‖‖	Hackensack		.81				.33							.14					.93					.08		.70							2.99
New York, N. Y***	Coast	.03				.51							T.	.26				.70	T.		T.			.01	.47			T.		T.			1.98
The Southern Interior.																																	
Belleplain	Tuckahoe					51								.22				.45							.20			T.					1.38
Bridgeton	Delaware		.08			.06								.20				.40	T.						.11								0.85
Burlington	Delaware		.05			.06								26				.80							.26								1.43
Camden***	..do	T.				.23							T.	.22				.87	T.					T	.27								1.51
Freehold	Raritan		.41			.78								.31				.40	T.				T		.45	.02							2.37
Hammonton	Mullica																																......
Hightstown	Raritan					.30								.30				.72							.40								1.72
Indian Mills	Mullica					.28				.04				.25				.37						.06	.22	.05							1.27
Lakewood	Metedeconk					.42								.30				.45							.33			.04					1.54
Moorestown ‖‖	Delaware		.09			.08	.07							.24	.06				.09						.18	.01							1.42
Northfield	Coast					.50								.16				.45						.05	.21								1.37
Pemberton	Delaware					.24								.32				.56	T.					T.	.22	.02		T.				T.	1.36
Pleasantville ‖‖	Coast					.37	.33							.13	.07				.36	.01				.04	.20	.05			.02				1.48
Port Norris	Maurice					.52								.22				.58					T.		.10								1.42
Runyon	Coast					.29								.28				.61							.45	T.							1.63
Treuton***	Delaware	.02	T.			.10							.01	.21				.77	T.				T.	.02	.16			.01		T.			1.30
Trenton No. 2 ‖‖	....do		.02			.08	.12							.26	.01				.82	T					.10	.19			.03		T.		1.63
Tuckerton	Coast					.37	.26							.08	.04	.12		.26				.06		.02	.20	.02			.02				1.45
Phila., Pa***	Delaware	.14	T.			.02							T.	.20				.84	T				T.	T.	.19								1.39
The Sea Coast.																																	
Asbury Park	Coast		.02			.50								.25				.20	T.					T.	*	.28		.05					1.30
Atlantic City***	....do				T.	.86				T.			T.	.14				.24	.01					T.	.37			.02					1.64
Long Branch**	....do	.03	.01			.42								.33				.29	T.					.01	.62			.08		T.			1.79
Sandy Hook***	....do				T	.31								.31				.21	T.					.04	.38			.02	.01	T.			1.28

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.13	30.54	21	29.60	7	14.8	42	nw.	25	78	63	73	71
Camden	30.13	30.58	21	29.58	7	7.3	32	nw.	25	81	55	76	......
Long Branch	30.10	30.55	21	29.54	7	......	......	......	......	78	63	69	68
New York, N. Y	30.11	30.60	21	29.58	7	13.0	57	nw.	25	73	59	65	66
Philadelphia, Pa	30.14	30.58	21	29.58	7	12.1	39	nw.	25	72	54	62	72
Ridgefield	30.11	30.61	21	29.59	7	......	......	......	......	......	......	......	......
Sandy Hook	30.11	30.58	21	29.59	7	13.8	46	nw.	25	79	77	74	67
Trenton	30.12	30.58	21	29.58	7	8.2	29	nw.	25	78	56	69	73

Daily Temperatures for October, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	82	75	69	71	64	75	73	76	73	67	67	74	64	61	68	72	61	61	61	68	63	74	67	54	47	52	63	54	55	70	79	66.5
	Minimum	54	52	41	40	51	42	42	43	44	42	41	44	47	32	32	35	55	35	31	40	38	55	45	40	36	25	31	40	25	45	35	40.6
Charlotteburg	Maximum	80	78	76	65	59	60	71	75	72	69	67	74	69	56	62	71	64	58	58	61	71	68	67	54	48	48	58	59	62	63	75	65.1
	Minimum	40	39	39	31	47	37	39	35	46	42	38	37	44	32	28	28	33	45	32	38	29	28	42	37	29	25	23	25	22	35	32	34.7
Dover	Maximum	76	65	63	62	56	69	66	69	70	62	63	72	64	56	63	67	61	57	55	65	58	68	59	50	48	47	57	51	53	63	75	61.6
	Minimum	54	50	41	37	46	42	45	39	46	44	42	41	41	34	30	32	45	35	34	44	34	53	43	41	33	28	27	34	25	39	35	39.2
Layton	Maximum	78	66	67	67	63	75	70	73	73	65	66	75	61	60	66	69	61	68	56	66	59	70	64	48	48	49	60	50	51	64	78	64.1
	Minimum	49	45	35	36	49	36	40	40	41	35	35	36	39	28	26	36	44	34	28	44	29	54	41	36	37	31	25	36	20	32	32	36.4
Long Valley	Maximum	78	77	74	65	63	71	70	70	72	64	65	73	71	64	65	68	65	57	57	66	61	69	66	54	49	55	64	54	54	64	76	65.2
	Minimum	44	52	42	36	36	37	44	37	42	44	38	36	45	33	28	31	46	32	30	39	34	53	42	40	34	23	26	40	27	36	31	37.4
Newton	Maximum	83	83	65	75	65	73	65	75	73	63	64	73	64	59	63	65	62	62	58	68	59	71	62	47	47	50	62	55	50	55	78	64.3
	Minimum	50	49	40	39	45	42	43	39	49	41	50	43	41	32	33	40	43	36	31	43	35	52	40	37	31	25	29	35	24	37	39	39.1
Phillipsburg	Maximum	79	69	67	65	63	75	71	73	69	65	67	75	60	60	65	69	62	57	56	60	61	58	59	49	47	47	60	51	53	66	76	63.0
	Minimum	53	47	43	41	46	43	46	44	45	45	41	42	45	36	33	35	44	36	34	44	39	56	46	42	35	28	31	40	29	38	37	40.8
Sussex	Maximum	82	76	72	73	62	81	72	74	78	....	67	76	68	64	69	72	65	57	63	67	64	74	67	55	47	54	61	59	53	63	75	67.0[a]
	Miuimum	53	50	39	38	50	41	41	39	45	....	39	48	48	32	31	35	56	37	33	45	36	54	43	38	36	25	28	42	24	37	35	39.9[a]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	77	69	68	68	60	73	70	76	73	64	66	73	58	51	55	70	63	62	59	69	61	74	58	60	53	51	59	53	55	55	78	63.9
	Minimum	50	50	40	39	46	40	45	38	44	39	44	40	47	37	32	30	38	34	31	39	34	45	45	41	39	28	27	33	26	26	35	38.1
Canoe Brook§§	Maximum	80	70	68	66	62	74	68	73	74	65	68	76	68	59	67	71	64	63	60	69	64	74	64	51	46	51	58	54	55	66	77	65.3
	Minimum	49	54	37	38	49	36	41	39	43	35	36	37	47	29	27	31	46	36	21	41	30	47	44	41	39	25	23	42	20	33	30	37.0
Elizabeth	Maximum	80	72	68	67	60	74	69	74	74	67	68	75	72	61	68	71	71	64	64	71	61	71	65	54	55	50	59	58	55	65	77	66.5
	Minimum	53	56	45	45	51	44	49	42	49	41	41	42	49	49	34	34	52	39	....	....	43	53	47	44	38	28	31	45	30	39	39	43.2[b]
Flemington	Maximum	82	75	68	65	60	73	77	72	75	68	69	77	70	65	69	74	67	63	63	74	66	75	62	56	48	55	60	54	57	72	80	67.5
	Minimum	54	55	44	42	51	44	45	42	46	45	43	42	47	36	32	34	53	37	35	39	38	48	44	41	36	25	28	43	27	36	37	40.9
Jersey City	Maximum	79	70	68	68	58	71	67	72	75	65	67	73	60	61	67	69	65	62	59	70	60	75	60	56	50	51	60	55	56	66	76	64.9
	Minimum	59	55	51	54	50	48	49	48	55	50	49	52	47	39	43	49	52	44	41	51	49	56	47	46	35	31	43	39	32	45	47	47.0
Lambertville	Maximum	73	67	67	60	71	72	74	73	63	66	75	62	58	67	73	72	63	61	59	65	63	74	63	50	48	50	59	52	53	69	76	64.4
	Minimum	54	44	45	45	42	43	43	49	45	44	47	46	33	38	39	41	50	41	35	45	43	52	44	40	33	25	30	38	26	40	40	41.3
Little Falls§§	Maximum	83	72	69	69	61	74	69	77	76	67	68	76	68	63	69	71	66	65	62	72	65	76	63	50	48	52	59	56	58	69	80	66.9
	Minimum	53	55	43	39	50	42	45	40	46	42	41	41	48	34	31	33	48	37	32	44	35	49	44	43	39	27	28	39	26	38	34	40.2
New Brunswick	Maximum	80	77	66	64	59	71	71	69	72	68	66	75	71	59	65	72	66	65	58	69	62	74	65	53	49	49	58	57	53	67	76	65.4
	Minimum	53	56	45	44	50	43	48	42	51	42	41	45	48	35	34	36	54	39	34	40	43	47	50	43	38	26	31	44	27	38	40	42.2
Paterson	Maximum	78	74	67	67	59	72	67	75	75	66	68	75	67	63	68	70	64	60	60	70	60	74	64	52	50	50	57	54	54	68	79	65.4
	Minimum	56	56	45	41	50	45	48	42	56	55	42	47	48	39	35	35	54	40	36	48	41	54	45	42	36	30	31	44	30	43	39	43.7
Plainfield	Maximum	80	72	68	69	58	74	70	73	75	66	68	76	60	60	67	72	63	62	60	70	61	74	60	56	50	52	58	53	56	67	77	65.4
	Minimum	55	55	45	43	50	41	46	40	46	41	42	40	47	36	31	34	49	37	32	37	37	47	48	43	34	27	28	40	27	39	36	40.4
Ridgefield	Maximum	78	68	67	65	56	69	65	72	72	64	65	72	57	61	66	67	67	63	57	68	59	72	60	53	46	48	59	54	54	65	75	63.4
	Minimum	56	48	44	42	48	42	45	40	54	44	44	49	38	35	34	38	54	42	33	47	44	54	48	44	30	25	28	38	28	40	45	42.0
Somerville	Maximum	81	75	68	68	62	72	72	73	74	66	68	72	64	65	....	....	66	64	....	70	62	74	70	70	51	50	....	....	55	68	78	67.6[c]
	Minimum	53	56	45	42	48	41	41	39	45	40	38	40	46	34	....	....	54	34	....	38	38	49	46	42	36	24	....	....	24	36	36	41.0[c]
New York, N. Y.	Maximum	78	68	68	66	58	69	65	72	75	64	66	72	60	61	66	67	67	62	58	70	59	76	60	56	49	51	60	55	55	65	75	64.3
	Minimum	60	54	52	55	50	49	50	49	57	51	50	54	45	39	44	50	53	45	42	52	50	58	45	47	35	31	44	37	32	46	48	47.5
The Southern Interior.																																	
Belleplain	Maximum	....	82	69	....	70	71	72	78	72	76	68	78	65	57	66	68	74	86	61	72	69	77	....	....	60	51	65	57	58	72	77	68.2[d]
	Minimum	....	52	43	....	44	37	45	42	43	38	34	39	45	31	28	42	33	35	42	36	41	48	....	....	26	20	30	32	25	34	34	37.0[d]
Bridgeton	Maximum	84	74	70	68	66	75	72	76	75	67	70	81	64	61	67	70	67	65	61	72	70	77	64	55	50	51	67	57	57	72	....	67.5[a]
	Minimum	57	58	45	47	53	44	48	48	48	44	41	46	46	37	34	38	58	40	37	43	45	51	49	43	37	25	32	43	28	41	....	43.5[a]
Burlington	Maximum	80	82	73	70	62	72	77	76	78	71	68	79	76	78	75	75	69	64	60	70	72	77	76	55	52	50	59	57	65	63	76	69.5
	Minimum	50	50	47	46	52	45	68	45	45	44	40	43	48	50	36	33	57	39	38	41	45	48	46	45	41	28	30	44	33	30	37	43.4
Camden	Maximum	83	69	69	68	62	73	75	82	84	68	68	81	60	58	66	76	65	66	62	70	70	76	59	52	48	50	62	54	56	68	77	66.7
	Minimum	58	54	48	47	52	47	50	45	52	51	43	46	37	40	34	40	52	43	39	45	45	51	49	43	35	31	31	38	32	37	39	43.7
Freehold	Maximum	80	71	67	66	59	71	69	73	74	66	67	77	64	57	66	73	67	63	59	68	63	75	65	55	54	49	60	55	53	65	76	65.4
	Minimum	55	55	43	41	52	41	48	43	46	44	43	44	49	33	36	43	54	40	34	44	45	49	49	45	35	25	32	43	27	39	40	42.5
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	81	77	66	68	58	72	69	80	75	67	66	77	71	58	66	74	67	64	61	68	63	75	68	53	49	57	58	57	54	66	72	66.4
	Minimum	52	55	43	42	50	42	46	41	48	41	42	46	48	35	33	37	57	38	33	43	41	47	48	42	37	23	30	37	26	31	38	41.0
Indian Mills	Maximum	82	77	69	68	60	70	71	80	76	68	70	81	67	58	68	76	67	66	63	71	70	79	70	55	55	53	60	60	58	68	79	68.2
	Minimum	63	57	45	42	53	40	45	42	48	39	36	41	49	32	30	34	55	36	30	39	43	45	49	43	43	23	27	37	25	33	35	40.6
Lakewood	Maximum	79	72	64	64	60	69	65	71	71	65	65	75	67	55	63	69	69	61	55	66	63	74	63	56	59	46	61	55	53	65	73	64.3
	Minimum	53	60	44	42	54	43	48	40	47	39	39	41	49	35	32	35	52	39	35	40	40	45	50	46	39	25	30	45	29	35	37	41.5
Moorestown	Maximum	80	70	67	70	62	72	72	77	73	67	69	78	60	58	66	74	65	63	61	69	68	76	58	50	52	51	60	53	55	68	77	65.8
	Minimum	56	52	46	46	46	43	47	44	48	46	40	43	41	36	35	38	48	40	37	43	44	47	48	43	30	27	31	33	28	38	38	41.4
Pemberton	Maximum	82	77	69	71	61	71	70	78	73	67	66	77	70	59	66	74	66	64	60	69	67	77	70	55	51	50	59	57	53	68	76	66.9
	Minimum	56	58	46	44	49	43	47	44	49	42	39	45	49	36	32	37	56	39	36	38	45	48	50	44	42	26	31	39	28	37	36	42.3
Pleasantville§§	Maximum	78	73	67	68	62	72	70	74	71	66	68	76	67	58	64	71	69	67	62	72	68	72	67	61	54	48	64	57	59	70	74	66.7
	Minimum	62	60	45	46	58	40	47	44	45	40	38	41	49	34	28	34	58	38	34	40	44	46	50	46	44	24	31	42	28	33	36	42.1
Runyon	Maximum	83	79	69	67	59	67	74	74	75	68	67	77	70	62	64	64	58	67	64	71	64	77	68	64	50	56	60	59	60	74	78	61.0
	Minimum	47	47	34	35	47	39	38	35	46	35	33	35	48	30	25	28	53	34	24	38	46	45	42	38	38	21	25	24	18	28	30	35.7
Trenton	Maximum	80	68	66	65	59	71	71	77	73	64	67	77	61	57	65	72	65	62	58	68	65	75	59	49	50	49	58	52	54	67	77	64.5
	Minimum	59	54	47	49	50	47	49	48	52	46	45	50	44	37	39	40	50	44	38	46	45	50	46	44	34	29	34	36	31	40	42	44.0
Tuckerton	Maximum	80	75	74	70	70	68	71	74	72	68	66	72	73	65	68	67	68	64	66	69	70	72	62	70	60	55	62	64	62	68	74	68.4
	Minimum	63	58	60	57	56	58	57	50	53	50	50	50	51	34	52	51	50	51	44	56	56	58	58	50	46	31	50	47	46	48	51	51.4
Philadelphia, Pa.	Maximum	81	70	71	68	63	73	74	78	72	66	66	77	66	59	65	73	66	63	59	70	69	75	61	53	53	51	62	57	58	69	79	66.7
	Minimum	61	57	52	53	53	51	53	54	56	53	53	54	49	42	47	48	57	47	42	50	50	56	50	46	36	32	41	38	37	47	53	49.0
The Sea Coast.																																	
Asbury Park	Maximum	74	71	....	65	62	68	65	69	78	65	67	79	66	59	65	68	68	61	55	68	60	68	64	61	60	47	59	57	53	63	75	64.7[a]
	Minimum	63	61	....	61	54	45	53	50	56	49	47	54	51	37	41	45	47	48	38	50	54	53	52	50	36	30	38	42	33	44	43	47.5[a]
Atlantic City	Maximum	76	73	65	67	63	69	67	74	70	67	67	73	66	59	63	70	68	65	60	73	67	70	67	62	56	50	64	58	54	68	74	66.0
	Minimum	68	58	50	61	52	46	52	57	53	49	48	59	48	40	45	52	54	46	42	56	56	61	52	49	34	31	46	38	35	43	48	49.4
Long Branch	Maximum	77	70	65	66	60	69	63	68	70	65	67	76	59	57	64	68	68	64	57	68	61	73	61	62	52	44	54	54	53	63	74	63.6
	Minimum	59	56	53	57	48	45	50	44	51	44	43	48	45	37	36	39	49	43	36	49	50	51	51	49	30	28	31	37	32	41	39	44.2
Sandy Hook	Maximum	78	69	65	66	60	69	63	67	69	64	66	74	64	57	65	66	67	62	55	67	61	70	61	58	51	48	57	54	52	63	71	63.2
	Minimum	63	59	55	56	54	52	54	53	57	52	51	54	48	43	47	52	54	48	44	52	52	58	50	48	37	34	42	40	36	46	47	49.6

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	.092	.144	.120	.060	*	.124	.096	.096	.096	.144	.064	.012	.048	.080	.112	.064	*	.060	.072	.064	.032	.036	.050	.012	.096	.072	.016	.096	.040	.056	.048	2.102
	Wind movement	17	19	12	11	22	19	43	4	3	5	7	8	7	8	6	7	25	7	13	25	10	17	24	11	33	41	13	9	19	9	7	461
Pleasantville**	Evaporation	.160	.160	.160	.178	.054	160	.160	.064	.128	.128	.112	.114	.070	.048	.128	.128	.040	.122	.096	.112	.064	.104	.120	*	.130	.096	.020	.128	.096	.064	.096	3.240
	Wind movement	31	79	60	30	57	40	61	18	55	26	37	32	57	41	25	24	66	28	36	44	49	54	38	68	80	81	19	30	65	21	24	1376
Runyon	Evaporation	.150	.150	.150	.100	.010	.080	.090	.090	.100	.100	.100	.080	.040	.090	.080	.080	.010	.080	.080	.080	.060	.080	.080	.000	.060	.080	.060	.090	.090	.090	.090	2.520
	Wind movement	29	19	20	23	23	17	14	14	17	13	14	23	13	14	16	11	14	20	16	20	20	13	16	36	44	10	5	23	22	9	9	558

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

Vol. XXXVIII. November, 1933. No. 11.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The first three days of the month were above normal, after which cold weather set in and prevailed then until the 20th with the exception of a single day. From the 20th on to the end of the month the temperature averaged warmer than usual most of the time, with the last day quite generally the warmest of the month. Lowest temperatures were nearly all between nine and seventeen degrees, and were registered on the 16th and 17th, while the highest were around the 70-degree mark and were recorded on the 30th, except for a few cases on the 1st and 3d. The average monthly temperature for the State as a whole is the lowest for November since 1917, and the seventh coldest in the record of 49 years.

Frequent light rain and snow occurred, yet the monthly total averaged the sixth smallest in 49 years. The main periods came during the 5-7th, 13-15th, 18th, and 26-27th, with light, scattered amounts in the intervals between. For the State as a whole the total amounted to 32% of the normal, ranging for the various sections as follows: Highland and Kittatinny Valley, 16%; Red Sandstone Plain, 24%; Sea Coast, 44%; Southern Interior, 49%. Over the extreme northern part of the State, about one-half to two-thirds of the monthly totals was from melted snow, while in the southern portion the amount occurring as snow ranged downward to practically nothing at all.

No damage by wind was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 38 stations, was 40.6°, which was 3.0° below normal. The highest temperature was 78° at Runyon on the 1st, and the lowest, 7°, at Layton on the 17th. The greatest daily range of temperature was 47° at Boonton on the 30th. The highest monthly mean temperature was 46.0° at Tuckerton, and the lowest, 35.6° at Layton.

The temperature departure from the normal for the year 1933, to date, by sections, is: The Highlands, +1.8°; Red Sandstone Plain, +0.6°; Southern Interior, +1.5°; Sea Coast, +2.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 1.01 inches, which was 2.17 inches below normal. The average total snowfall at 20 selected stations was 0.6 inch. The greatest monthly precipitation was 1.89 inches, at Atlantic City, and the least, 0.08 inch at Belvidere. The greatest amount of precipitation in any 24 consecutive hours was 1.16 inches at Atlantic City on the 5-6th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 7, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1933, to date, by sections, is: The Highlands, +3.62 inches; Red Sandstone Plain, +4.66 inches; Southern Interior, +3.56 inches; Sea Coast, +0.81 inch.

WIND.

The prevailing wind direction was from the west. The wind movement averaged 13 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 47 miles per hour from the northwest on the 27th at Sandy Hook.

MISCELLANEOUS.

The per cent of possible sunshine was 54, or 4 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.01 inches, or 0.09 inch below normal. The highest reading was 30.59 inches at Atlantic City and Trenton on the 17th, and the lowest 29.25 inches at Ridgefield on the 14th.

The mean stage of the Delaware River at Phillipsburg was 2.1 feet, and the highest 2.7 feet on the 1st. At Trenton the mean stage was 1.5 feet, and the highest 1.9 feet on the 25th.

Dense fog occurred quite generally over the whole State on the 2d and 3d, and in the southern portion on the 26th. Sleet occurred in the northern half of the State on the 5th, 6th, 7th, 13th, 17th and 18th.

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	44.8	+1.2	76	18	4.53	+1.35	7.90	2.27	......	....	....	....	....
1886	44.5	+0.9	73	17	4.49	+1.31	6.24	3.45	......	....	....	....	....
1887	41.5	−2.1	72	13	1.94	−1.24	2.60	0.95	......	6	....	....	....
1888	45.8	+2.2	77	8	3.97	+0.79	5.41	2.66	......	10	....	....	....
1889	45.7	+2.1	69	13	**8.48**	+5.30	11.45	4.70	......	13	....	....	....
1890	43.8	+0.2	74	11	0.82	−2.36	1.10	0.38	......	8	13	12	5
1891	42.2	−1.4	70	6	2.39	−0.79	3.47	1.54	......	4	12	10	8
1892	41.9	−1.7	71	12	7.29	+4.11	9.49	4.74	......	11	8	9	13
1893	41.8	−1.8	70	11	3.48	+0.30	4.53	2.19	......	7	10	11	9
1894	40.3	−3.3	76	11	3.34	+0.16	5.12	1.77	..	10	13	7	10
1895	45.7	+2.1	80	12	3.17	−0.01	5.10	1.56	0	10	12	7	11
1896	48.2	+4.6	78	12	3.05	−0.13	5.68	1.37	3.2	8	9	9	12
1897	43.8	+0.2	74	10	4.59	+1.41	5.95	2.42	1.3	12	8	11	11
1898	42.4	−1.2	70	11	6.76	+3.58	9.07	3.83	**14.7**	14	10	9	11
1899	44.0	+0.4	71	17	2.29	−0.89	4.32	0.72	1.1	7	15	8	7
1900	47.5	+3.9	79	15	3.43	+0.25	5.54	1.82	T.	9	9	10	11
1901	**38.5**	−5.1	69	10	2.38	−0.80	4.23	1.18	0.8	6	12	9	9
1902	49.3	+5.7	80	20	2.20	−0.98	4.17	0.87	0.2	8	10	11	9
1903	39.9	−3.7	79	3	1.26	−1.92	2.03	0.75	T.	6	16	8	6
1904	40.2	−3.4	69	6	2.18	−1.00	3.40	1.30	1.6	6	12	10	8
1905	42.1	−1.5	70	6	1.84	−1.34	2.86	0.54	0.1	6	12	10	8
1906	43.6	0.0	70	8	1.61	−1.57	2.52	1.06	2.3	6	16	7	7
1907	43.5	−0.1	**68**	13	5.65	+2.47	6.95	4.19	0.8	13	10	8	12
1908	43.1	−0.5	72	2	0.96	−2.22	1.29	0.35	2.2	4	14	8	8
1909	46.4	+2.8	80	12	2.36	−0.82	4.33	1.32	2.1	8	13	8	9
1910	40.4	−3 2	71	13	3.79	+0.61	5.73	1.63	1.4	9	5	13	12
1911	41.3	−2.3	73	13	5.17	+1.99	6.50	3.17	1.7	10	8	11	11
1912	45.3	+1.7	76	11	3.43	+0.25	8.12	2.02	1.3	6	15	8	7
1913	46.2	+2.6	77	21	2.71	−0.47	4.89	1.00	T.	7	14	7	9
1914	43.3	−0.3	80	6	2.60	−0.58	4.81	1.21	0.7	6	16	8	6
1915	44.0	+0.4	75	17	1.69	−1.49	3.11	0.96	0	8	14	8	8
1916	43.3	−0.3	75	12	2.11	−1.07	3.81	0.80	T.	8	16	5	9
1917	39.8	−3.8	**68**	9	**0.56**	−2.62	1.15	0.18	0.7	3	19	5	6
1918	43.9	+0.3	71	12	1.87	−1.31	3.05	0.49	0	7	14	6	10
1919	43.7	+0.1	76	13	3.74	+0.56	6.18	1.98	T.	11	13	7	10
1920	43.0	−0.6	74	12	4.41	+1.23	7.90	2.14	0.2	10	9	6	15
1921	44.3	+0.7	79	18	4.26	+1.08	6.69	2.79	0.1	14	9	6	15
1922	44.3	+0.7	73	13	0.91	−2.27	1.56	0.49	0.2	6	13	8	9
1923	43.1	−0.5	72	11	2.51	−0.67	4.09	1.10	0	7	11	8	11
1924	42.9	−0.7	77	1	2.03	−1.15	3.23	1.17	1.3	5	14	8	8
1925	42.0	−1.6	76	10	3.40	+0.22	5.10	2.48	0.7	9	14	8	8
1926	42.5	−1.1	76	8	4.04	+0.86	7.19	2.44	T.	9	13	8	9
1927	47.9	+4.3	78	15	4.02	+0.84	8.68	1.74	0.1	11	10	8	12
1928	45.1	+1.5	78	13	1.90	−1.28	2.76	1.20	0.3	9	10	9	11
1929	44.5	+0.9	**83**	4	2.73	−0.45	3.64	2.08	0.4	10	10	7	13
1930	44.1	+0.5	73	2	3.70	+0.52	6.54	1.41	0.2	9	12	6	12
1931	**50.3**	+6.7	80	14	0.82	−2.36	1.19	0.42	1.6	6	12	7	11
1932	42.0	−1.6	71	3	7.81	+4.63	**12.66**	3 92	T.	9	14	6	10
1933	40.6	−3.0	78	7	1.01	−2.17	1.89	**0.08**	0.6	7	13	7	10
Period	43.6	....	83	1	3.18	....	12.66	0.08	1.1	8	12	8	10

W. B. O. Philadelphia-12-22-33-875.

Climatological Data for November, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	39.2	−1.9	69	1†	13	16	32	0.08	−3.16	0.05	T.	2	10	5	15	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	36.8	−3.3	72	1†	10	16	41	0.55	−2.97	0.22	2.0	8	14	8	8	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	9	16	....	0.62	−2.18	0.52	5.0	3	15	9	6	sw.	Brice E. Riker.
Dover	Morris	600	49	37.2^{a}	−2.9	68	30	11	16	34	0.57	−3.07	0.25	T.	8	7	11	12	......	William C. Harris
Layton	Sussex	480	32	35.6	−3.2	70	30	7	17	34	0.54	−1.95	0.47	4.3	3	7	1	22	sw.	A. M. Depue.
Long Valley	Morris	520	3	38.1	......	72	1	11	16	36	0.60	......	0.20	......	5	13	6	11	w.	S. N. Dilts.
Newton	Sussex	769	50	37.3	−3.2	73	3	9	16	32	0.67	−2.46	0.62	3.0	2	4	9	17	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	38.6	−2.6	69	30	14	16	32	0.64	−2.56	0.55	T.	4	12	6	12	......	Town Engineer.
Sussex	Sussex	442	38	38.0^{a}	−3.1	68	1†	11	16	34	0.24	−3.01	0.20	2.0	2	19	3	8	......	A. J. W. Mowatt
Means and extremes	......	......	....	37.6	−2.9	73	3	7	17	41	0.50	−2.67	0.62	2.0	4	11	7	12	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	38.6	−2.8	77	30	14	16	47	0.30	−3.27	0.10	......	5	17	1	12	nw.	John Kline.
Canoe Brook	Essex	173	3	38.6	......	70	30	12	16†	41	0.67	......	0.37	......	4	19	3	8	w.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	......	......	......	......	....	1.37	−1.53	0.35	......	9	13	10	7	......	Paul Molitor. Sr.
Elizabeth	Union	45	54	42.6	−0.9	73	30	14	17	32	0.84	−2.41	0.47	T.	7	16	8	6	nw	Union County Park Comm.
Flemington	Hunterdon	140	§47	40.9	−2.0	71	30	14	16†	38	0.88	−2.24	0.52	T	8	14	6	10	s.	Hiram E. Deats.
Jersey City	Hudson	10	35	41.8	−2.2	70	30	17	16	25	0.85	−2.34	0.50	0.6	6	9	10	11	n.	S. K. Pearson.
Lambertville	Hunterdon	430	46	39.5	−3.7	76	1	13	15	33	0.91	−2.30	0.60	1.5	6	13	4	13	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	40.2	−2.0	71	30	14	16	42	0.58	−2.32	0.24	0.3	8	17	5	8	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	40.9	−2.5	72	1	14	16	35	0.86	−2.62	0.55	0.2	6	14	9	7	nw	N. J. Experiment Station
New Milford‡‡	Bergen	40	15	......	......	......	......	......	......	....	0.80	......	0.22	......	6	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	63	40.3	−3.2	70	30	15	16	28	0.64	−2.53	0.23	T.	8	13	7	10	w.	William H. Meyer.
Plainfield	Union	120	45	39.8	−2.7	70	30	13	16	39	0.93	−2.44	0.47	0.5	8	8	13	9	sw.	S. K. Pearson.
Ridgefield	Bergen	80	16	40.0	......	69	30	14	16	27	0.96	......	0.43	0.3	7	7	14	9	nw.	George P. Kirsten.
Somerville	Somerset	70	50	39.8^{c}	−2.6	71	30	12	16	40	0.27	−2.77	0.17	T.	3	13	6	11	w.	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	......	....	0.78	......	0.21	......	7	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	63	41.8	−2.4	69	30	17	16	23	0.85	−2.11	0.49	0.5	7	10	9	11	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	40.2	−2.5	77	30	12	16†	47	0.78	−2.43	0.60	0.2	7	13	8	9	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	41.9^{d}	−2.6	73	30	9	16	42	1.65	−0.96	1.09	T.	5	13	4	13	sw.	A. F. Waldron.
Bridgeton	Cumberland	30	50	42.5	−3.1	72	1	16	16	36	1.77	−1.03	1.00	1.0	7	18	4	8	w.	Bennett K. Matlack
Burlington	Burlington	12	§47	43.6	−0.8	72	1	17	16	43	1.00	−2.11	0.74	T.	2	17	9	4	sw.	Public Service Power Co.
Camden	Camden	20	1	41.9	......	74	30	18	16	33	1.00	......	0.78	T	6	12	7	11	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	41.4	......	70	30	14	16	31	1.55	−2.17	1.08	T.	6	18	4	8	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown	Mercer	146	40	40.8	−2.5	71	30	13	16	33	1.25	−2.06	0.84	T.	6	13	8	9	nw.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	43.3	+0.4	74	3†	11	17	37	1.84	−2.24	1.14	T.	5	11	11	8	w.	James M. Armstrong.
Lakewood	Ocean	54	29	41.4	−1.4	71	3	12	17	37	1.63	−0.83	1.05	0.1	7	9	11	10	nw.	R. W. Holman.
Moorestown	Burlington	62	70	41.0	−2.2	72	30	17	16†	34	1.31	−1.94	0.85	0.2	5	8	11	11	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	1.79	−0.59	1.15	T.	6	....	....	....	......	William L. Fliek.
Pemberton	Burlington	55	3	42.5	......	72	1	16	16†	37	1.43	......	0.98	0.3	7	15	7	8	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	41.8	......	74	30	11	16	40	1.83	−0.89	1.15	......	9	19	5	6	sw.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	1.86	......	0.90	0	5	13	9	8	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	39.8	......	78	1	12	16	41	1.06	......	0.69	......	3	21	7	2	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	41.6	−2.8	71	30	16	16	32	1.08	−1.65	0.62	1.0	8	9	9	12	w.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	......	......	......	....	1.11	......	0.70	1.4	7	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	46.0	+1.9	70	3	10	16	28	0.86	−2.22	0.36	T.	6	15	3	12	nw.	John H. Brown.
Philadelphia, Pa	......	114	62	44.1	−1.6	73	30	20	16	27	1.07	−1.63	0.71	0.2	7	9	8	13	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	42.1	−1.5	78	1	9	16	43	1.43	−1.47	1.15	0.3	6	14	7	9	w.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	42.8	−2.0	71	30	16	16	26	1.23	−1.69	0.70	T.	7	17	5	8	nw.	Information Bureau.
Atlantic City	Atlantic	16	60	44.7	−0.9	73	30	17	16	24	1.89	−0.93	1.16	T.	9	10	8	12	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	39.8	−4.4	71	30	15	16	25	1.12	−2.40	0.71	0.3	6	7	12	11	w.	William D. Martin.
Sandy Hook	Monmouth	22	35	41.8	−4.0	66	30	19	16	20	1.24	−2.01	0.81	0.5	8	7	11	12	w	U. S. Weather Bureau.
Means and extremes	......	......	....	42.3	−2.8	73	30	16	16	26	1.37	−1.76	1.16	0.2	8	10	9	11	w.	
For the State	......	......	....	40.6	−3.0	78	1	7	17	47	1.01	−2.17	1.16	0.6	7	13	7	10	w.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for November, 1933

Stations	Drainage Basin	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware											T			.05	T.			T.				.03				T.	T.					0.08
Charlotteburg	Passaic						.21	.02	.01	.03		.01			.02				.03									.22					0.55
Culvers Lake	Delaware						.52	T.		T.			.08	T.	T.				T.		T.		T.				T.	.02					0.62
Dover	Passaic					*	.25		T.	*	.03			.06	T.	T.						*	.03				.20						0.57
Layton	Delaware						.47	T.					.03	.04	T.	T	T.											T.					0.54
Long Valley	Morris						.16	.12				.05			.07												.20						0.60
Newton	Delaware						.62		T.	T.		T.	.05	T.	T.	T.					T.						T.	T.					0.67
Phillipsburg	...do					.29	.26		T.	T.	T.	T.		.05	T.	T.		T.	T	T.	T.	T.	T.				.04						0.64
Sussex	Hudson						.20			T.				.04	T.																		0.24
The Red Sandstone Plain.																																	
Boonton ‖	Passaic						.01	.08	T.		T.		T.		.10	T.			.01				T.					.10					0.30
Canoe Brook ‖	Essex						.37	T							.10				.10				T.					.10					0.67
Chatham ‖	...do						.35	.19		T.	.09		.05		.16	.09	T.		.12				.03					.29					1.37
Elizabeth	Coast						.47	.01	T	T.					.04	T.			.15				.03				.07	.07					0.84
Flemington	Raritan					T.	.52		.02					T.	.09	.02			.13				.04				.04	.02					0.88
Jersey City	Coast					T.	.50	T.	T.	T.		.01		T.	.09	T.			.11	T.		T.	.01				.13						0.85
Lambertville	Delaware					T.	.60			T.	.04			T.	.09				.08				.04				.06						0.91
Little Falls ‖	Passaic						.22	.02					.02		.13	.02			.06				.02					.09					0.58
New Brunswick	Raritan						.55	T.	T.				T.		.17	.03			.05				T.				.04	.02					0.86
New Milford ‖	Hackensack						.18	.04							.22				.13					.02				.21					0.80
Paterson	Passaic						.23		.02	T.		.03		.01	.14				.08				.01				T.	.12					0.64
Plainfield	Raritan						.47	T.	T.	T.	.02	T.		.14	.02	.01		T.	.10	T.		T.	.02				.15						0.93
Ridgefield**	Hackensack					T.	.43	T.	.02	T		.05		.12	T.			T.	.11	T.	T.	T.	.01				.22	T.					0.96
Somerville	Raritan						.17							T		T.			.09				.01				T.	T.					0.27
Woodcliff Lake ‖	Hackensack						.06	.15	.03				.04		.21				.08									.21					0.78
New York, N. Y***	Coast					.06	.43	T.	T.	T.		.01		.09	T.	T.			.12	T.		T.	.01				.13						0.85
The Southern Interior.																																	
Belleplain	Tuckahoe						1.09								.25	T.			.11				.10	T.			.10	T.					1.65
Bridgeton	Delaware					1.00								.31	.11			.24				.03	.05				.03						1.77
Burlington	Delaware						.74		T.						T.	T.											.26	T.					1.00
Camden***	..do					.40	.38		T.	T.	T.	T.			.04	.01			.14	T.		T.	T.				.03	T					1.00
Freehold	Raritan						1.08	T.	T.			.02			.13	T.			.10				.01					.21					1.55
Hammonton	Mullica																																......
Hightstown	Raritan				.02		.84	.02	T						.14	T.			.08				T.					.15					1.25
Indian Mills	Mullica						1.14								.28	T.			.22					.02			.18						1.84
Lakewood	Metedeconk					T.	1.05		T	T.	T	T.	.04		.14	.09			.16				T.				.08	.07					1.63
Moorestown ‖	Delaware						.85		T.		T.				.23	.06			.14									.03					1.31
Northfield	Coast						1.15						.01		.14				.14				.25				.10						1.79
Pemberton	Delaware					.01	.98		T.		T.		T.		.21	.01			.13				T.				.08	.01	T.				1.43
Pleasantville ‖	Coast						1.08	.07			T.		.01		.11	.02			.16	T.			.18	.08	T.			.12					1.83
Port Norris	Maurice						.90								.51				.06					.11				.28					1.86
Runyon	Coast						.69								.17													.20					1.06
Trenton***	Delaware					.30	.32	T.		T.	T.			.20	.01	.10		T.	.06	T.			.03				.06						1.08
Trenton No. 2 ‖	...do						.70	T.				T.	T.		.19	.05	.03		.06		T.		.01	T.				.07					1.11
Tuckerton	Coast						.36								.11				.10				.21	.02			.06						0.86
Phila., Pa***	Delaware					.46	.25		T	T	T.			.13	.03	.04		T.	.12	T.			T.				.04	T.					1.07
The Sea Coast.																																	
Asbury Park	Coast					*	.70		T.				.02	T.	.07	T.			.23				.01				.20						1.23
Atlantic City***	...do					.52	.64			.01	T.	.02		.05	.03				.14	T.		T.	.30	T.			.18						1.89
Long Branch**	...do					T.	.71		T.			.01		.05	.01	T.			.11			T.	T.				.23						1.12
Sandy Hook***	...do					.08	.73	T.	T.	T.		.01		.12	.04	.02			.06				T.				.18						1.24

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station: precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.03	30.59	17	29.34	14	16.3	41	w.	27	74	65	69	56
Camden	30.02	30.58	17	29.30	14	9.7	28	w.	30	78	57	73	......
Long Branch	30.01	30.57	17	29.28	14	......	......	......	......	72	66	62	57
New York, N. Y	29.99	30.55	17	29.26	14	15.6	53	nw.	10	71	60	61	58
Philadelphia, Pa	30.02	30.59	17	29.33	14	13.2	33	s.	13	67	54	60	57
Ridgefield	29.99	30.54	17	29.25	14	......	......	......	......	......	......	......	......
Sandy Hook	29.99	30.56	17	29.27	14	15.6	47	nw.	27	76	75	73	51
Trenton	30.01	30.59	17	29.28	14	9.6	24	s.	13	74	58	69	51

Daily Temperatures for November, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	69	64	61	57	42	36	47	45	38	48	45	45	61	49	33	28	35	39	41	48	50	60	50	43	51	53	51	52	51	69	....	48.7
	Minimum	44	38	41	26	26	26	35	33	24	35	22	30	29	32	21	13	15	30	32	32	23	45	32	25	32	27	28	25	29	41	....	29.7
Charlotteburg	Maximum	72	72	61	62	55	38	39	39	41	40	42	41	58	59	43	28	36	40	44	47	43	47	59	48	51	54	51	53	49	53	....	48.8
	Minimum	33	31	39	36	23	27	29	31	25	25	29	22	36	18	17	10	15	24	27	28	17	20	23	20	21	24	22	21	25	26	....	24.8
Dover	Maximum	64	64	60	52	43	37	43	43	37	39	36	42	58	37	....	27	34	40	38	47	55	59	49	40	52	53	35	51	51	68	....	46.7[a]
	Minimum	43	36	44	33	25	29	33	29	27	26	23	25	24	27	15	11	15	30	30	29	21	34	30	23	23	25	25	25	27	46	....	27.8
Layton	Maximum	63	65	61	52	42	35	43	41	35	38	35	44	53	44	30	27	33	39	37	47	41	57	44	40	52	53	45	52	52	70	....	45.7
	Minimum	40	31	37	35	18	22	32	31	26	26	20	26	24	28	15	9	7	30	26	29	16	34	29	19	28	22	21	18	24	44	....	25.6
Long Valley	Maximum	72	62	61	57	49	37	43	43	40	38	40	40	60	58	34	25	33	41	40	41	55	57	57	48	50	55	50	51	48	68	....	48.4
	Minimum	44	34	39	37	23	29	33	31	30	26	21	31	32	23	18	11	14	30	30	29	20	28	21	31	22	33	26	23	24	42	....	27.8
Newton	Maximum	70	68	73	58	42	39	41	42	36	40	38	42	62	47	29	27	33	37	35	47	47	59	46	41	51	53	45	52	53	72	....	47.5
	Minimum	40	38	45	36	21	25	30	31	24	23	21	28	30	28	15	9	12	27	12	27	20	39	34	20	31	28	20	27	31	41	....	27.1
Phillipsburg	Maximum	63	64	62	52	40	37	46	43	40	41	38	43	60	39	31	28	36	40	39	48	55	58	46	42	50	52	39	53	50	69	....	46.8
	Minimum	43	39	42	34	27	31	36	32	28	29	26	29	33	30	17	14	17	33	33	33	24	35	34	28	35	28	30	24	28	37	....	30.3
Sussex	Maximum	68	64	60	59	47	38	42	42	41	37	37	44	60	51	37	28	34	....	39	46	38	56	48	40	52	57	51	52	53	68	....	47.9[a]
	Minimum	43	36	41	37	24	28	31	35	26	29	22	31	26	30	18	11	12	....	28	29	21	35	30	21	29	25	26	23	28	42	....	28.2[a]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	67	61	69	54	43	39	46	47	41	45	42	45	61	37	35	29	35	42	39	50	57	60	49	41	51	64	39	54	55	77	....	49.1
	Minimum	38	35	41	39	25	28	32	34	28	31	28	29	27	34	21	14	15	19	31	31	21	27	29	26	27	26	26	22	27	30	....	28.0
Canoe Brook§§	Maximum	67	64	62	55	50	40	45	45	41	41	40	52	63	52	35	30	37	40	44	50	58	61	52	46	52	55	44	55	59	70	....	50.2
	Minimum	44	33	44	36	24	30	34	31	22	25	22	32	22	32	19	12	12	27	31	28	18	28	25	24	25	25	26	21	22	35	....	27.0
Elizabeth	Maximum	71	65	60	60	48	41	48	50	45	47	43	45	61	54	35	30	35	38	42	55	61	67	60	44	57	59	56	60	54	73	....	52.1
	Minimum	47	39	43	41	29	32	36	35	29	31	24	35	29	33	21	20	14	33	35	34	31	50	37	31	32	32	31	29	33	43	....	33.0
Flemington	Maximum	69	65	62	61	49	40	50	48	41	46	39	49	63	49	34	33	39	39	44	53	52	64	54	45	55	59	47	60	56	71	....	51.2
	Minimum	46	38	44	39	27	31	36	34	29	32	25	32	25	33	21	14	14	31	33	32	24	45	33	27	31	24	30	23	28	38	....	30.6
Jersey City	Maximum	65	65	61	55	43	41	46	45	44	41	44	45	60	43	35	32	38	41	42	50	57	62	50	44	53	57	43	54	54	70	....	49.3
	Minimum	48	47	49	39	29	31	36	35	30	33	26	35	36	33	20	17	18	33	33	34	32	47	36	32	36	38	28	32	38	45	....	34.2
Lambertville	Maximum	76	65	62	54	42	39	46	43	40	39	45	56	46	32	28	37	36	39	39	49	59	59	48	41	51	56	47	56	56	70	....	48.5
	Minimum	45	45	46	36	25	31	35	29	27	24	31	30	29	18	13	15	20	33	33	28	26	43	35	27	31	29	29	27	32	42	....	30.5
Little Falls§§	Maximum	68	66	64	58	48	38	46	46	41	42	40	47	60	42	35	31	37	42	43	51	58	73	51	43	55	57	46	56	61	71	....	50.5
	Minimum	44	36	43	38	26	30	33	35	28	31	25	33	36	34	21	14	16	23	32	30	22	31	30	27	29	29	26	27	28	37	....	29.8
New Brunswick	Maximum	72	65	62	60	51	39	45	44	42	41	40	45	64	54	33	28	35	38	39	50	61	60	51	43	51	57	50	54	54	71	....	50.0
	Minimum	46	38	46	40	27	31	36	34	28	31	26	35	29	32	22	14	15	31	34	30	26	51	34	28	32	30	29	27	29	42	....	31.8
Paterson	Maximum	69	64	63	58	43	39	45	44	40	40	38	44	58	51	33	30	36	41	41	49	54	61	49	41	51	54	49	53	51	70	....	48.6
	Minimum	45	39	47	40	27	31	35	35	29	32	24	34	30	32	21	15	17	31	32	33	26	48	33	29	33	34	26	28	32	43	....	32.0
Plainfield	Maximum	67	65	61	55	41	39	46	45	41	41	43	46	64	46	32	30	36	40	43	49	58	62	50	43	52	58	45	59	55	70	....	49.1
	Minimum	42	37	43	39	26	31	36	35	28	33	24	33	25	33	20	13	16	32	32	33	23	50	32	27	28	28	28	25	28	39	....	30.6
Ridgefield	Maximum	62	63	62	55	42	40	42	45	43	40	37	48	59	36	30	30	30	38	41	51	55	61	48	45	52	56	38	55	52	69	....	47.5
	Minimum	45	44	46	38	29	31	32	36	27	29	23	32	33	30	21	14	15	32	33	31	32	52	37	30	29	40	28	28	33	45	....	32.5
Somerville	Maximum	68	64	62	56	51	48	46	....	42	43	40	46	64	45	44	34	38	40	42	....	....	61	57	43	53	57	50	56	53	71	....	50.9[c]
	Minimum	42	37	43	39	27	32	34	....	22	26	20	32	24	33	19	12	15	23	30	....	....	41	32	26	27	25	30	21	26	38	....	28.7[c]
New York, N. Y.	Maximum	64	65	62	55	43	42	46	44	45	41	45	45	59	42	35	32	38	41	41	51	56	62	50	44	53	56	42	55	52	69	....	49.2
	Minimum	49	48	50	37	29	31	36	32	30	30	26	35	39	31	19	17	18	35	33	34	34	47	36	32	37	42	27	32	40	47	....	34.4
The Southern Interior.																																	
Belleplain	Maximum	71	68	69	....	....	57	50	47	47	46	....	50	66	45	40	34	39	43	52	57	64	62	49	47	...	58	43	62	58	73	....	53.7[d]
	Minimum	34	34	41	40	30	34	36	36	22	31	....	20	24	32	26	9	10	33	33	30	28	47	35	31	....	25	28	25	27	42	....	30.1[b]
Bridgeton	Maximum	72	69	67	59	43	41	49	45	45	42	50	50	66	39	32	29	40	41	46	56	61	63	60	53	54	56	48	62	62	71	....	52.4
	Minimum	43	47	40	29	32	36	37	26	31	25	36	31	34	25	18	16	28	32	34	31	35	40	40	32	30	31	29	33	41	35	....	32.6
Burlington	Maximum	72	66	68	62	60	63	49	49	43	43	45	68	67	53	39	30	37	41	45	52	63	61	55	46	54	57	59	58	59	69	....	54.4
	Minimum	44	45	42	40	41	30	38	36	29	34	31	34	24	32	23	17	19	23	29	30	30	50	37	32	33	28	27	28	32	43	....	32.7
Camden	Maximum	64	67	70	55	42	41	49	45	44	40	45	46	67	39	33	30	40	42	42	52	62	60	52	46	53	60	42	60	61	74	....	50.8
	Minimum	45	40	45	38	30	32	39	33	30	31	28	32	35	32	22	18	19	35	36	32	29	43	39	33	32	28	30	29	30	46	....	33.0
Freehold	Maximum	67	66	67	61	45	42	45	44	42	41	45	44	64	53	34	28	36	42	40	51	60	60	49	43	51	59	50	55	55	70	...	50.3
	Minimum	45	39	48	38	28	38	36	34	27	31	23	34	35	32	22	14	16	30	35	35	29	46	36	30	32	32	31	28	29	41	....	32.5
Hammonton	Maximum	....	....	....	....	....	...	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	..	....	....	......
	Minimum	..	....	...	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	66	65	70	62	47	40	46	46	42	42	41	46	58	58	33	29	36	37	40	51	59	53	53	45	52	54	54	54	57	71	....	50.2
	Minimum	45	37	44	38	27	31	36	35	27	34	24	35	29	31	20	53	15	30	33	31	26	51	36	28	32	28	31	28	30	44	....	31.5
Indian Mills	Maximum	73	70	74	67	53	43	46	47	45	44	44	48	68	57	36	30	38	40	40	53	65	62	58	50	55	62	56	60	60	74	....	53.9
	Minimum	48	37	45	41	29	33	38	38	22	30	20	38	36	33	25	14	11	30	34	33	28	54	37	37	37	28	32	25	28	39	....	32.7
Lakewood	Maximum	65	63	71	66	47	44	46	45	44	44	42	48	63	57	36	28	36	39	40	52	62	59	50	45	51	55	50	56	53	70	....	50.9
	Minimum	44	37	45	40	31	34	38	37	28	31	25	35	27	34	23	15	12	31	30	30	25	49	37	34	32	29	34	28	28	37	....	32.0
Moorestown	Maximum	66	66	68	55	42	41	47	45	44	41	47	45	66	39	33	29	38	40	41	52	62	57	52	45	52	59	40	59	59	72	....	50.1
	Minimum	43	40	46	35	29	32	37	31	28	28	25	33	32	33	19	17	17	33	34	30	29	41	39	32	31	29	28	28	32	44	....	31.8
Pemberton	Maximum	72	68	69	64	49	43	48	45	44	43	43	47	66	53	37	28	37	29	41	52	64	61	52	46	53	51	50	58	59	71	....	52.1
	Minimum	43	40	47	38	28	32	38	37	26	33	25	38	29	31	24	16	16	31	34	34	29	51	39	33	32	29	33	28	30	42	....	32.9
Pleasantville§§	Maximum	63	67	66	58	48	50	49	47	48	44	51	54	62	54	37	32	43	42	43	56	60	62	53	46	54	57	42	62	57	74	....	52.7
	Minimum	45	35	42	41	30	35	38	39	24	29	21	29	22	35	26	11	13	21	31	34	27	50	35	33	31	26	30	27	27	36	....	30.8
Runyon	Maximum	78	76	66	64	48	40	44	48	46	40	40	64	54	40	38	31	36	44	54	58	64	62	60	57	58	54	48	54	54	72	....	53.1
	Minimum	42	42	38	31	24	24	28	24	24	21	19	23	34	32	23	12	13	18	26	29	30	30	26	27	26	24	23	24	22	27	....	26.5
Trenton	Maximum	65	65	66	53	40	41	48	44	43	40	46	45	65	40	34	28	38	41	43	51	62	59	49	44	52	58	41	57	58	71	....	49.6
	Minimum	49	41	50	37	29	31	37	32	29	29	26	35	36	32	19	16	19	34	35	34	30	45	39	32	34	31	31	30	37	46	....	33.6
Tuckerton	Maximum	62	61	60	64	52	50	60	58	62	50	48	52	58	50	40	38	44	44	49	50	59	60	55	45	50	56	44	60	61	60	....	53.9
	Minimum	50	51	52	42	38	38	41	38	41	34	28	40	41	34	26	10	26	36	35	36	40	39	38	36	35	38	36	40	40	44	....	38.1
Philadelphia, Pa	Maximum	66	66	67	55	42	42	49	46	46	41	46	48	65	40	35	31	39	45	42	52	62	61	53	45	52	58	42	61	61	73	....	51.0
	Minimum	53	52	52	40	32	34	39	34	33	33	31	38	40	32	22	20	21	37	38	38	35	51	42	36	28	35	35	34	43	47	....	37.2
The Sea Coast.																																	
Asbury Park	Maximum	68	60	60	59	49	48	46	47	46	45	45	50	58	47	37	30	37	41	41	52	56	60	51	48	51	52	51	56	50	71	....	50.4
	Minimum	51	44	43	33	36	38	37	35	30	32	26	35	37	32	23	16	17	34	35	35	31	51	42	38	35	34	32	32	38	48	....	35.2
Atlantic City	Maximum	61	65	64	56	47	50	50	47	50	44	53	52	60	43	35	31	44	44	44	56	57	63	49	46	52	56	41	61	55	73	....	51.6
	Minimum	54	48	54	44	34	40	39	34	32	32	30	41	42	32	21	17	20	37	35	39	39	45	44	38	37	41	34	40	40	50	....	37.8
Long Branch	Maximum	59	62	62	55	43	44	47	45	44	40	44	45	58	38	32	23	25	39	40	50	55	59	47	44	50	55	43	53	48	71	....	47.8
	Minimum	43	39	40	40	33	35	38	30	28	28	24	31	33	32	17	15	16	30	29	33	33	38	33	31	32	30	32	28	29	48	....	31.8
Sandy Hook	Maximum	60	60	57	53	41	43	45	45	44	42	45	46	56	41	34	29	37	40	40	48	57	57	47	43	50	53	41	52	50	66	....	47.4
	Minimum	50	49	52	40	33	35	39	35	33	33	30	37	40	32	21	19	20	36	35	35	37	44	39	35	38	40	31	34	40	46	....	36.3

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged o the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Pleasantville**	Evaporation	.064	.064	.080	.032	.120	006	.064	.064	.048	....	.010	.112	.062	.020	....	....	.160	....	....	.080	.004	.064	.016	.032	.048	056	.144	.064	.048	.160	....	1.622
	Wind movement	27	27	17	54	140	1	90	50	54	77	78	129	56	85	112	51	89	93	35	71	41	118	38	31	34	25	122	115	43	171	....	2074
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

51.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

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24

NEW JERSEY SECTION.
H. O. GEREN.
TRENTON, N. J.

VOL. XXXVIII. DECEMBER, 1933. No. 12.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Rather wide variations in temperature occurred during the month, accompanied by frequent but less than normal amount of precipitation. Two well marked warm periods prevailed from the 3d to 8th, inclusive, and the 16th to 25th. Cold weather prevailed from the 9th to 15th and from the 26th to 31st, inc. Most of the highest temperatures recorded during the month were registered during the second warm period, generally the 22d, 24th and 25th. They were in the fifties and sixties while the lowest were nearly all below zero and observed on the 28th, 29th and 30th. The lowest ranged between five and fifteen degrees below zero in the Highlands, from five to ten below in the Red Sandstone Plain section, about zero to five below in the Southern Interior, while over the Sea Coast district they were a degree or two above and below that mark. For most stations the low points were the lowest in fifteen years.

Precipitation occurred frequently but the total for the month was moderately below the normal. The heaviest general amounts occurred on the 20th and 26th, the former being rain and the latter snow. This snow blanketed the State to the depth of from three to twelve inches, except in the extreme southern part which had very little or none at all. The monthly averages in percentages of the normal for the various districts were as follows: Highlands, 70; Red Sandstone Plain, 75; Southern Interior, 92; Sea Coast, 79; State, 87.

No damage by wind was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 37 stations, was 31.8°, which was 1.9° below normal. The highest temperature was 72° at Tuckerton on the 1st, and the lowest, —18°, at Runyon on the 28th. The greatest daily range of temperature was 54° at Little Falls on the 31st. The highest monthly mean temperature was 37.3° at Tuckerton, and the lowest, 27.0° at Layton.

The temperature departure from the normal for the year 1933, by sections, is: The Highlands, +1.6°; Red Sandstone Plain, +0.5°; Southern Interior, +1.4°; Sea Coast, +1.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 45 stations, was 3.19 inches, which was 0.46 inch below normal. The average total snowfall at 20 selected stations was 7.4 inches. The greatest monthly precipitation was 5.77 inches at Freehold, and the least, 2.12 inches at Layton. The greatest amount of precipitation in any 24 consecutive hours was 1.90 inches at Burlington on the 21st. The mean of the number of days on which 0.01 inch or more of precipitation fell was 12, or 3 more than normal.

The precipitation accumulated departure from the normal for the year 1933, by sections, is: The Highlands, +2.46 inches; Red Sandstone Plain, +3.68 inches; Southern Interior, +3.26 inches; Sea Coast, —0.04 inch.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 12 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 44 miles per hour from the northwest on the 27th at Sandy Hook.

MISCELLANEOUS.

The per cent of possible sunshine was 45, or 7 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.15 inches, or 0.05 inch above normal. The highest reading was 30.94 inches at Trenton on the 29th, and the lowest 29.53 inches at Long Branch and Ridgefield on the 11th.

The mean stage of the Delaware River at Phillipsburg was 2.5 feet, and the highest 4.0 feet on the 22d. At Trenton the mean stage was 2.2 feet, and the highest 4 6 feet on the 29th.

Dense fog occurred in sections of the State, mostly in the southern portion, on the following dates: 3, 4, 15, 16, 17, 18, 23 and 24. Sleet fell quite generally throughout the State on the 13th, 14th, 15th, 20th, 26th and 30th.

ERRATA.

September 1933: Monthly precipitation at Northfield should be 4.17 inches, departure +1.67 inches. Charlotteburg precipitation should be 7.36 inches, departure +3.14 inches; Highlands and Kittatinny Valley Section mean precipitation should be 7.49 inches, departure +3.53 inches; Mean precipitation for the State should be 6.16 inches, departure +2.60 inches. October 1933: Maximum amount of precipitation in 24 hours at Asbury Park should be 0.50 inch on the 5th.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	35.3	+1.6	60	6	3.15	−0.50	4.33	2.47	......	....	....	....	....
1886	29.1	−4.6	60	−2	3.51	−0.14	4.65	1.62	......	....	....	....	....
1887	33.7	0.0	62	6	5.29	+1.64	7.32	3.64	......	10	....	....	....
1888	34.9	+1.2	65	5	3.69	+0.04	4.95	2.05	......	8	....	....	....
1889	**41.5**	+7.8	71	8	1.62	−2.03	3.69	**0.25**	......	9	....	....	....
1890	30.9	−2.8	56	3	3.89	+0.24	5.74	2.34	......	8	11	10	10
1891	40.9	+7.2	71	9	4.25	+0.60	5.32	2.25	......	8	13	9	9
1892	30.4	−3.3	68	1	1.87	−1.78	3.09	1.30	......	6	9	11	11
1893	34.9	+1.2	70	5	3.39	−0.26	4.66	1.67	......	11	11	10	10
1894	34.8	+1.1	66	−3	4.36	+0.71	6.39	1.64	......	9	12	9	10
1895	37.2	+3.5	70	3	2.61	−1.04	5.42	1.71	0.4	6	11	9	11
1896	31.3	−2.4	64	−15	**1.48**	−2.17	2.70	0.85	10.7	4	14	9	8
1897	35.1	+1.4	69	−3	4.90	+1.25	6.44	3.07	3.4	11	8	11	12
1898	33.3	−0.4	66	−2	3.53	−0.12	4.85	2.38	2.0	9	12	10	9
1899	35.5	+1.8	69	−1	2.11	−1.54	4.30	1.29	0.5	7	14	10	7
1900	34.4	+0.7	64	−2	2.59	−1.06	3.97	1.47	4.1	6	14	10	7
1901	32.6	−1.1	68	−8	**7.30**	+3.65	**9.45**	4.87	2.1	11	12	9	10
1902	31.7	−2.0	62	−11	7.23	+3.58	8.99	5.81	9.1	13	13	7	11
1903	28.6	−5.1	56	−13	4.08	+0.43	5.49	3.20	9.2	9	14	9	8
1904	27.0	−6.7	60	−15	3.19	−0.46	5.38	2.06	**21.1**	12	10	7	14
1905	36.3	+2.6	61	5	3.65	0.00	5.60	2.58	1.5	7	14	8	9
1906	33.0	−0.7	70	−5	3 99	+0.34	6.18	2.70	1.4	13	9	8	14
1907	36.6	+2.9	70	−3	4 91	+1.26	7.13	3.55	5.9	9	12	8	11
1908	34.0	+0.3	**72**	1	3.63	−0.02	5.26	2.10	7.8	11	10	8	13
1909	29.8	−3.9	60	−15	4.45	+0.80	5.51	3.55	12.6	5	14	8	9
1910	26.5	−7.2	58	−14	2.79	−0.86	4.60	1.92	11.3	9	11	10	10
1911	38.4	+4.7	70	2	3.77	+0.12	5.09	2.94	5.6	11	10	7	14
1912	36.9	+3.2	68	−1	4.73	+1.08	6.33	3.40	11.0	9	12	9	10
1913	37.7	+4.0	63	−11	3.03	−0.62	4.59	1.47	0.8	7	13	9	9
1914	31.1	−2.6	66	−9	5.86	+2.21	9.12	2.99	2.4	12	10	6	15
1915	31.9	−1.8	64	3	4.82	+1.17	7.83	2.19	13.6	8	12	9	10
1916	32.3	−1.4	70	−8	4.61	+0.96	6.34	3.35	12.6	11	13	8	10
1917	24.8	−8.9	54	−21	3 18	−0.47	5.46	1.55	11.5	8	13	7	11
1918	37.5	+3.8	66	9	3.92	+0.27	4.94	3.21	0.5	10	12	7	12
1919	28.8	−4.9	67	−18	2.98	−0 67	5.14	1.84	6.8	12	10	8	13
1920	36 4	+2.7	69	7	5.10	+1.45	6.63	2.86	1.0	8	11	8	12
1921	32.3	−1.4	64	−4	2.37	−1.28	3.23	1.62	6.2	9	13	8	10
1922	32.5	−1.2	65	−8	3.86	+0.21	5.26	3.09	7.3	12	9	9	13
1923	40.8	+7.1	69	9	4.14	+0.49	5.14	2.44	2.6	12	13	7	11
1924	32.8	−0.9	68	−4	2.58	−1.07	3.42	1.85	0 4	8	10	8	13
1925	34.0	+0.3	61	−5	2.84	−0.81	4.58	1.08	0.6	10	13	7	11
1926	28.4	−5.3	52	−7	3.44	−0.21	4.74	1.67	8.2	11	11	7	13
1927	35.3	+1.6	70	2	4.54	+0.89	5.76	2.80	**T.**	12	13	6	12
1928	36.3	+2.6	63	3	1.64	−2.01	4.63	0.69	2.7	8	15	5	11
1929	33.8	+0.1	68	2	3.01	−0.64	4.34	1.00	4.1	10	11	6	14
1930	33.0	−0.7	60	−5	2.67	−0.98	3.92	1 58	5.2	8	10	7	14
1931	39.6	+5.9	72	7	2.27	−1.58	3.24	1.57	0.4	9	13	5	13
1932	36.0	+2.3	69	−6	3.08	−0.57	4.72	1.52	10.1	13	12	6	13
1933	31.8	−1.9	**72**	−18	3.19	−0.46	5.77	2.12	7.4	12	12	5	14
Period	33.7	......	72	−21	3.65	....	9.45	0.25	5.7	9	12	9	10

W. B. O. Philadelphia-1-29-34-875.

Climatological Data for December, 1933

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	29.4	−1.2	59	1	−5	29†	29	2.77	−1.30	0.71	9.0	13	12	1	18	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	41	31.8	+2.0	68	1	−17	29	51	3.25	−1.08	0.76	12.7	14	14	5	12	ne.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	32	......	......	......	......	−16	30	....	2.33	−1.33	0.75	14.0	10	16	6	9	nw.	Brice E. Riker.
Dover	Morris	600	49	27.8^{a}	−2.1	59	24	−8	30	35	2.97	−1.33	1.01	10.3	10	7	12	12	......	William C. Harris
Layton	Sussex	480	32	27.0	−0.4	55	24	−14	29	44	2.12	−1.82	0.50	10.5	13	8	4	19	w.	A. M. Depue.
Long Valley	Morris	520	3	29.2	......	60	1	−7	28†	36	2.93	......	0.70	15.0	10	9	6	16	w.	S. N .Dilts.
Newton	Sussex	769	50	27.8	−2.3	53	24†	−14	30	47	3.27	+0.44	0.64	15.3	14	8	5	18	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§50	30.2	−1.1	52	22	−2	29	29	2.66	−1.08	0.86	8.8	11	12	7	12	......	Town Engineer.
Sussex	Sussex	442	38	28.4	−1.5	56	1	−12	30	36	2.62	−0.94	0.56	9.5	9	14	4	13	......	A. J. W. Mowatt
Means and extremes	......	......	....	29.0	−0.9	68	1	−17	29	51	2.77	−1.16	1.01	11.7	12	11	6	14	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§43	30.5	0.0	63	25	−10	30	52	2.15	−1.83	0.56	......	11	7	4	20	nw.	John Kline.
Canoe Brook	Essex	173	3	29.2	......	55	24	−16	28	39	2.79	......	0.98	.....	10	10	9	12	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	29	......	......	....	......	......	......	....	3.47	−0.70	0.90	13.0	16	15	2	14	......	Paul Molitor. Sr.
Elizabeth	Union	45	54	33.3	0.0	64	1	−6	30	31	3.78	−0.18	1.16	12.2	14	14	5	12	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§47	31.6	−0.4	63	1	−7	29	37	2.58	−1.18	0.80	9.5	12	15	4	12	nw.	Hiram E. Deats.
Jersey City	Hudson	10	35	32.8	−1.3	54	3	−6	30	28	3.41	−0.52	1.00	13.5	11	10	7	14	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	46	30.8	−2.8	55	22	−5	29†	34	3.05	−0.82	1.29	12.3	11	12	6	13	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§30	31.0	−0.5	58	24	−9	30	54	3.11	−0.98	0.75	11.6	15	17	0	14	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	80	31.2	−2.0	62	1	−5	30	32	2.51	−1.16	0.65	8.8	12	15	4	12	nw.	N. J. Experiment Station
New Milford‡‡	Bergen	40	15	......	......	......	......	......	......	....	2.98	......	0.66	......	13	....	....	....	.....	Hackensack Water Co
Paterson	Passaic	80	63	31.0	−2.1	56	1	−9	30	31	3.38	−0.68	1.00	8.4	13	11	5	15	sw.	William H. Meyer.
Plainfield	Union	120	45	31.0	−1.7	55	1	−7	30	31	2.83	−1.23	1.03	12.2	13	11	4	16	nw.	S. K .Pearson.
Ridgefield	Bergen	80	16	31.0	..... .	54	22	−9	30	29	3.01	......	0.94	14.4	10	11	9	11	nw.	George P. Kirsten.
Somerville	Somerset	70	50	......	......	......	......	......	......	....	2.30	−1.55	0.70	......	10	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	15	......	......	......	......	......	......	....	3.55	......	0.81	......	15	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	63	32.9	−2.1	54	3	−6	30	30	3.33	−0.29	1.01	13.2	11	7	6	18	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	31.2	−1.2	64	1	−16	28	54	2.99	−0.98	1.29	11.6	12	13	5	13	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	39	33.6^{d}	−1.5	63	25	2	30	44	4.74	+0.79	1.16	......	9	15	4	12	ne.	A. F. Waldron.
Bridgeton	Cumberland	30	50	34.2	−2.0	62	24	1	29	30	3.65	−0.17	1.06	2.5	12	17	2	12	nw.	Bennett K. Matlack
Burlington	Burlington	12	§47	34.2	+0.4	69	1	−1	30	34	3.95	−0.37	1.90	8.3	11	14	8	9	sw.	Public Service Power Co.
Camden	Camden	20	1	33.1	......	61	24	0	30	28	2.62	......	1.09	4.8	12	9	6	16	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶29	32.0	......	61	24	−5	30	32	5.77	+2.05	1.50	9.0	11	15	3	13	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§27	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown	Mercer	146	40	32.2^{a}	−0.4	61	24	−5	30	35	3.58	−0.11	1.10	11.3	9	13	5	13	nw.	H. M. Barrett.
Indian Mills‡‡	Burlington	76	44	33.8^{d}	0.0	68	1†	0	30	39	2.67	−1.73	0.93	4.0	11	12	4	15	nw	James M. Armstrong.
Lakewood	Ocean	54	29	33.6	+0.1	61	24	−3	30	31	3.25	−1.39	1.08	4.8	12	13	4	14	nw.	R. W. Holman.
Moorestown	Burlington	62	70	32.6	−0.9	61	24	−1	30	29	3.65	−0.04	0.96	5.4	15	14	4	13	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	26	......	......	......	......	......	......	....	3.98	−0.14	1.65	2.1	10	....	....	....	.... .	William L. Flick.
Pemberton	Burlington	55	3	33.6	......	65	1	−1	30	33	2.84	......	1.03	4.5	14	13	6	12	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§35	36.4^{a}	......	59	22†	1	30	35	4.23	−0.01	1.67	......	12	14	4	13	n.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	1	......	......	......	......	......	......	....	3.49	......	1.52	2.0	7	13	7	11	n.	S. T. Garrison.
Runyon‡‡	Middlesex	18	10	28.6	......	58	25	−18	28	40	3.78	......	1.30	......	10	19	4	8	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	61	32.2	−2.2	57	22	−2	30	28	2.62	−0.73	0.84	7.8	11	7	9	15	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	8	......	......	......	......	......	......	....	2.92	......	0.98	8.6	13	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	40	37.3	+2.9	72	1	−4	30	35	2.76	−1.75	0.91	0.5	15	13	6	12	nw.	John H. Brown.
Philadelphia, Pa	......	114	62	36.2	−0.1	61	22	3	30	28	2.52	−0.91	1.01	5.1	11	8	7	16	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	33.3	−0.4	72	1	−18	28	44	3.56	−0.30	1.90	5.4	11	13	5	13	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	44	34.3	−0.7	60	1	−1	29†	29	3.60	−0.25	0.98	3.5	11	13	6	12	nw.	Information Bureau.
Atlantic City	Atlantic	16	60	37.2	+0.8	58	25	3	30	27	4.25	+0.31	1.55	3.9	12	7	10	14	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	25	32.3	−1.8	56	22	−1	29	28	2.88	−1.86	0.98	7.1	13	8	9	14	nw.	William D. Martin.
Sandy Hook	Monmouth	22	35	33.0	−2.2	54	25	−1	29	24	2.44	−1.60	0.80	7.2	13	7	5	19	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	34.2	−1.0	60	1	−1	29†	29	3.29	0.85	1.55	5.4	12	9	7	15	nw.	
For the State	......	......	....	31.8	−1.9	72	1	−18	28	54	3.19	−0.46	1.90	7.4	12	12	5	14	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for December, 1933

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.18	.38		.11					.10			.14	.14	.10	.30	.10		.33	.17			.01		.71						2.77
Charlotteburg	Passaic			.05	.40		.19			.01	.12			.21		.11	.18	.25			.27	.37	.39			.60	.10						3.25
Culvers Lake	Delaware				.32	T.	.06			T.		.10		T.	.22	.08	19	.31			.30						.70	.05			T.		2.33
Dover	Passaic			.06	.32		.16			T.		.13		.05	.05		*	.39			1.01						.80						2.97
Layton	Delaware			.02	.36		.17					.06		.04	.01	*	.24	.36			.35	.15					.34	.02			T.		2.12
Long Valley	Morris			.04		.20				T.		.20		T	.10	T	.34	T	.10	.35	.40						.70	.50					2.93
Newton	Delaware			.05	.32		.12					.08		.10	.52	.25	.22	.32	.04		.30	.31					.60	.04			T.	T.	3.27
Phillipsburg	...do			.14	.11	T	.13			T.		.11		.10	T.	.13	.13	.43	.03		.49	T			T.		.86				T.		2 66
Sussex	Hudson			.12	.29		.07					.10		T.	.32	T.		.56			.08	.55					.53				T.		2.62
The Red Sandstone Plain.																																	
Boonton‖‖	Passaic			T.	.20	.02	.02	.05				.05	T.		.20	T.	.28		.43		T.	.56					.03	.31				T	2.15
Canoe Brook‖‖	Essex			T.	.13	.09	T.	.11		T.	T.	.10	T.		.17	.12	.18	T.	.23		T.	.68					T.	.98				T.	2.79
Chatham‖	...do			.03	.16	.09	.07	.14		.03		.22			.21	T.	.30	.04	.22		.08	.74	T.				.22	.90				.02	3.47
Elizabeth	Coast			.01	.45		.18			.04		.15		T.	.15	.40	.15	.22	.08		.70	.07					1.16	.02			T.	T.	3.78
Flemington	Raritan			T.	.23		.14			T.		.11	T.	T.	.05	.05	.19	.22	.06		.58	.15					.70	.10			T.		2.58
Jersey City	Coast	T.		T.	.52	T.	.13			.07		.14		.10	.10	.10	.23	.27			.75						1.00				T.	T.	3.41
Lambertville	Delaware			.02	.20		.12			.03		.08		.06		.16	.09	T.			1 29						.90	.10			T.		3.05
Little Falls.‖‖	Passaic			.02	.24	.05	.01	.12			T.	.10			.26	.12	21		.35	.02	.75						.29	.56				.01	3.11
New Brunswick	Raritan			T	.36		.08			.10		.08		T.	.13	.09	.17	.19	T.		.62	.02					.65	.02					2.51
New Milford‖‖	Hackensack			.03	.15	.22	.04	.23				.10	.02		.29		.26		.33			.66					.10	.55					2.98
Paterson	Passaic			.04	.30		.17			T.		.08		.06	.20	.13	.17	.32	.12		.63	.16					1.00				T.	T.	3.38
Plainfield	Raritan			T	.33	T.	.13			.07		.08		.14	*	*	.22	*	.21		.04	.58					1.03				T.		2.83
Ridgefield**	Hackensack			.07	.52	T.				.06		.23			.27	.07		.27			.57						.94				.01		3.01
Somerville	Raritan				.20		.05			T		.03		T.	.09	.07	.19	.20	.09		.68						.70						2.30
Woodcliff Lake‖‖	Hackensack			.04	.20	.23	.06	.21				.13	.02		.29		.31		.39		.03	.76	.03				.04	.81					3.55
New York, N. Y***	Coast			.07	.44	T.	.13			.06		.14		.19	T	.16	.16	.25			.72						1.01				T.	T.	3.33
The Southern Interior.																																	
Belleplain	Tuckahoe			T.	.70		.05			1.00	.75			T.	T.	.01	.04				1.16	.10					.93						4.74
Bridgeton	Delaware			.33			.18			.17	.14			.11		.20	.08			1.06	.30					.45	.60					.03	3.65
Burlington	Delaware				.37		.15			.05		.03	.30			.25	.10	T.				1.90	.05				.59	.16					3.95
Camden***	..do			.04	.06		.10			.05		.03		.04	.05	.02	.10	.16			.88						1.09						2.62
Freehold	Raritan			.12		.26	.05			1.00	T.	1.50				.37	.16	.20			.88	.03					1.20						5.77
Hammonton	Mullica																																......
Hightstown	Raritan				.32		.13			.18		.08			.19		.32	.47			1.10						.79						3.58
Indian Mills	Mullica			.21	.25					.08				T	.02	.02	.16	.13	.04		.78	.05						.93					2.67
Lakewood	Metedeconk			.12	.24		T.			.20		.06		.03	.04	.17	.11	.20	.02		1.08						.98						3.25
Moorestown‖‖	Delaware				.13	.04	.03	.09		T.	.29	.20			.11	.02	.17	.11	.11		.54	.45					.40	.96					3.11
Northfield	Coast			.01	.75		.04			.16		.07		T	.06	T.	.10	.12			1.65						1.02	T.					3.98
Pemberton	Delaware			.04	.25		.09			.06	T.	.05		.05	.06	.02	.14	.15	T.		1.03	.01	T.				.85	.04			T.		2.84
Pleasantville‖‖	Coast				.91	T	T.	.02		T	.26	.06			.16	T.	.09	.03	.03		.94	.73					.20	.80					4.28
Port Norris	Maurice			.20			T	T		.22		.15		.05			.20			1.52							1.15						3.49
Runyon	Coast				.34		.07			.20			.40		.03	.03	.23	.42			.76						1.30						3.24
Trenton***	Delaware			.13	.17		.08			.03		.08	T.	.15	T.	.13	.09	.21			.84				T.		.71				T.		2.62
Trenton No. 2‖‖	...do			T.	.23	.02	T.	.06			.07	.07	T		.17	T.	.18	.11	.13		.27	.63					.27	.71				T.	2.92
Tuckerton	Coast			.46	.21		.02			.03	.01	.01			.03	.02	.07	.17	.02		.76					.21	-70					.04	2.76
Phila., Pa***	Delaware			.05	.05	T.	.11			.03		.03		.05	T.	.06	.06	.19	T		1.01						.88				T.		2.52
The Sea Coast.																																	
Asbury Park	Coast			.20	.39		.08			.11		.09		.04	.38	.12		.35	T		.98						.86				T.		3.60
Atlantic City***	...do			.33	.64		.04			.31		.11		.03	.05	.02	.05	.07	T.		1.55						1.05						4.25
Long Branch**	...do			.28	.32		.01			.10		.08		.16	.02	.13	.14	.20			.98						.50				.01		2.88
Sandy Hook***	...do			.12	.40		.08			.03		.12		.11	.01	.07	.14	.16			.80						.39				.01		2.44

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.15	30.87	29	29.58	11	15.5	42	w.	11	76	67	71	48
Camden	......	......	......	......	......	8.7	34	nw.	11	81	69	73	......
Long Branch	30.14	30.88	29	29.53	11	......	......	......	......	74	68	71	48
New York, N. Y	30.11	30.90	29	29.54	11	14.2	56	nw.	11	73	64	64	46
Philadelphia, Pa	30.15	30.96	29	29.60	11	12.3	38	nw.	25	68	60	61	45
Ridgefield	30.11	30.91	29	29.53	11	......	......	......	......	......	......	......	......
Sandy Hook	30.12	30.88	29	29.55	21	14.8	44	nw.	27	80	79	75	36
Trenton	30.14	30.94	29	29.56	11	9.1	34	nw.	11	79	66	70	47

Daily Temperatures for December, 1933

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	59	46	47	46	40	45	44	48	41	26	31	25	27	33	25	42	36	46	40	35	43	45	46	46	50	35	25	21	16	10	38	37.3
	Minimum	32	18	38	39	35	40	25	28	25	12	16	13	9	12	11	19	30	33	21	29	33	32	28	35	33	13	12	0	-5	-5	9	21.6
Charlotteburg	Maximum	68	50	52	50	48	48	44	49	47	32	30	27	31	29	26	51	54	52	51	56	44	50	48	60	58	46	45	34	21	6	45	43.6
	Minimum	23	16	36	26	23	31	22	22	24	20	19	9	23	10	7	20	29	31	26	27	18	35	34	27	40	38	32	-12	-17	-10	-6	20.1
Dover	Maximum	49	49	51	48	40	45	43	48	30	20	20	20	25	30	31	50	38	44	41	35	42	50	44	59	42	....	15	12	-2	10	44	35.8[a]
	Minimum	22	18	39	35	33	37	26	25	13	9	14	10	11	12	11	30	30	31	21	30	33	33	28	33	26	18	0	-4	-7	-8	9	19.9
Layton	Maximum	48	54	45	43	38	47	43	49	35	33	30	20	24	31	20	48	36	45	41	32	40	50	40	55	53	36	28	24	18	6	42	36.6
	Minimum	29	10	36	35	34	38	21	22	15	8	16	7	5	5	5	16	32	32	15	22	31	32	26	30	27	17	7	-10	-14	11	6	17.5
Long Valley	Maximum	60	45	48	48	40	45	42	40	45	26	32	28	27	28	28	48	47	44	43	41	40	50	49	52	52	32	27	18	18	8	38	38.4
	Minimum	24	16	36	36	32	37	22	22	22	9	13	12	12	14	9	27	28	34	20	40	31	30	27	34	20	19	10	-7	-6	-7	6	20.1
Newton	Maximum	51	51	45	45	38	46	43	49	40	19	31	23	25	39	24	50	42	45	39	35	40	51	41	53	53	35	16	21	20	6	42	37.4
	Minimum	22	15	35	34	30	36	27	27	19	7	12	9	11	8	4	20	29	31	20	27	31	31	27	30	27	15	5	0	-10	-14	-5	18.1
Phillipsburg	Maximum	45	47	48	45	42	47	42	49	38	27	35	24	26	30	28	41	37	45	40	36	44	52	46	47	50	34	25	22	12	14	38	37.3
	Minimum	26	20	39	40	36	40	26	27	20	14	18	14	11	17	15	28	32	34	24	30	32	34	30	37	30	20	8	2	-2	-1	13	23.0
Sussex	Maximum	56	52	45	44	39	46	42	49	41	23	30	22	25	31	17	45	38	45	39	36	42	50	41	48	50	33	23	22	20	5	37	36.6
	Minimum	25	16	36	38	34	38	35	36	32	9	14	10	11	14	5	15	25	32	19	27	32	32	29	31	29	18	9	-7	-9	-12	5	20.3
The Red Sandstone Plain.																																	
Boonton§§	Maximum	62	49	48	42	44	48	46	50	44	34	52	24	27	31	37	52	47	53	45	41	43	52	45	63	50	35	21	24	7	24	44	41.4
	Minimum	42	18	19	39	33	34	27	24	27	11	11	13	11	12	10	15	29	34	19	20	31	32	26	31	33	20	13	-2	-6	-10	-8	19.6
Canoe Brook§§	Maximum	45	50	50	44	47	47	47	51	38	32	34	24	28	31	38	49	45	46	43	43	46	54	45	55	40	37	21	23	13	28	45	40.0
	Minimum	33	13	28	40	33	36	20	20	25	10	15	12	4	7	5	17	27	33	15	25	31	32	26	34	32	20	12	-16	-5	-11	0	18.5
Elizabeth	Maximum	64	52	54	56	47	49	53	50	47	38	41	29	28	29	28	45	42	50	47	45	47	55	55	53	55	42	29	25	18	12	40	42.7
	Minimum	33	26	36	40	39	43	30	30	28	10	16	12	12	20	17	27	30	35	24	30	33	34	33	38	35	20	14	-4	-3	-6	9	23.9
Flemington	Maximum	63	52	49	48	41	46	45	53	43	32	37	27	26	35	25	46	44	46	42	38	45	56	52	58	54	39	24	26	19	8	44	40.7
	Minimum	35	19	38	41	35	41	26	26	25	12	17	13	11	18	14	25	31	35	23	29	32	31	30	34	34	20	11	-6	-7	-4	7	22.5
Jersey City	Maximum	50	47	54	49	44	50	47	48	44	27	33	26	31	31	36	50	46	46	46	42	46	53	46	53	51	34	26	23	15	13	40	40.2
	Minimum	31	23	42	40	34	39	31	32	23	11	20	15	17	19	18	32	36	40	31	35	34	34	34	37	31	22	13	7	-3	-6	12	25.3
Lambertville	Maximum	50	49	49	47	47	46	44	49	45	27	35	24	25	31	29	46	41	46	41	36	44	55	48	54	54	32	23	21	16	9	42	38.9
	Minimum	32	19	37	37	32	40	26	25	24	11	17	11	13	16	17	26	34	35	24	32	32	31	33	36	32	19	15	2	-5	-5	8	22.8
Little Falls§§	Maximum	46	51	51	44	47	48	48	51	33	32	33	26	28	33	40	55	47	48	44	43	45	53	46	58	41	35	21	25	12	30	50	40.8
	Minimum	38	19	31	40	34	35	25	26	31	11	15	13	12	16	12	16	30	34	20	28	31	34	28	35	32	20	13	-4	-5	-9	-4	21.2
New Brunswick	Maximum	62	50	50	48	41	48	46	50	40	27	35	26	25	30	27	44	40	46	42	38	45	55	51	55	55	35	25	23	19	9	40	39.6
	Minimum	34	18	38	38	35	40	25	26	24	12	17	14	13	18	16	26	30	35	22	31	33	32	32	35	35	20	13	-3	-2	-5	9	22.9
Paterson	Maximum	56	48	49	48	41	47	43	50	42	25	31	24	27	28	25	51	43	46	42	38	44	51	45	51	54	31	27	23	20	8	39	38.6
	Minimum	30	21	40	38	34	40	30	30	25	12	17	13	16	18	13	25	33	36	25	32	35	34	32	37	30	19	13	2	-5	-9	8	23.4
Plainfield	Maximum	55	48	54	49	45	50	48	48	44	26	32	26	28	31	30	46	46	45	46	42	46	52	46	54	50	31	24	23	15	10	38	39.6
	Minimum	31	18	37	41	34	39	27	25	21	11	19	13	12	15	12	30	35	42	22	35	35	31	30	34	31	21	7	-6	-4	-7	7	22.5
Ridgefield	Maximum	45	48	52	43	43	50	44	49	48	22	32	25	32	28	42	53	46	48	46	42	46	54	46	53	40	29	21	23	14	16	40	39.4
	Minimum	22	20	40	40	33	40	30	30	19	10	14	12	14	18	14	30	35	35	30	35	32	32	34	35	28	29	3	-3	-5	-9	12	22.6
Somerville	Maximum	....	....	48	49	41	47	46	53	39	28	37	26	26	34	31	....	....	47	30	38	47	56	....	....	....	32	25	26	16	....	....	......
	Minimum	....	....	33	39	35	40	22	24	25	12	15	14	6	13	13	....	....	35	13	28	34	34	....	....	....	20	11	4	-3	....	....	......
New York, N. Y	Maximum	48	48	54	49	44	50	47	49	43	28	34	26	32	30	41	53	46	46	46	43	47	54	46	53	54	35	26	23	15	14	42	40.8
	Minimum	26	24	43	37	34	38	32	33	17	11	17	15	18	20	19	33	37	36	33	35	33	35	35	38	31	22	12	8	-3	-6	12	25.0
The Southern Interior.																																	
Belleplain	Maximum	53	....	59	57	50	52	49	51	40	27	40	43	28	32	....	55	....	54	58	45	50	59	55	....	63	38	34	33	25	21	52	45.3[d]
	Minimum	27	....	15	41	32	43	24	20	24	11	10	13	7	15	....	25	....	34	23	26	35	30	30	....	33	33	15	9	4	2	13	22.0[d]
Bridgeton	Maximum	51	51	57	52	50	54	45	53	40	28	40	27	29	29	42	51	54	52	45	48	49	55	57	62	44	37	20	25	9	32	54	43.3
	Minimum	21	37	35	34	36	28	26	29	13	16	15	12	21	20	29	39	39	25	31	36	32	33	36	36	25	17	12	5	1	9	32	25.2
Burlington	Maximum	69	49	58	49	50	50	48	51	43	30	36	28	26	36	32	49	50	52	46	40	45	57	53	55	59	49	28	25	24	11	41	43.2
	Minimum	39	20	40	37	35	42	30	26	25	14	13	16	12	20	19	25	36	40	35	31	35	32	34	36	34	15	17	7	2	-1	11	25.1
Camden	Maximum	50	50	50	53	44	51	46	50	39	27	39	26	26	30	38	47	40	51	42	40	46	60	56	61	54	32	27	26	13	16	42	41.0
	Minimum	28	22	38	39	36	41	29	26	17	15	20	18	15	21	21	35	35	35	25	34	37	34	34	33	30	23	11	11	1	0	17	25.2
Freehold	Maximum	59	48	52	50	54	58	55	49	39	27	31	25	27	28	32	43	41	48	41	42	47	56	51	61	54	32	22	22	18	13	44	40.9
	Minimum	34	19	38	27	37	36	27	26	25	10	17	13	15	19	16	31	34	36	25	33	33	32	32	31	32	22	12	2	-2	-5	12	23.2
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	60	49	49	49	43	50	46	50	46	26	37	28	26	30	30	41	40	48	42	38	47	55	53	61	....	55	37	26	18	10	44	41.1[a]
	Minimum	36	19	38	39	34	40	26	28	24	11	16	13	12	18	16	28	32	35	23	32	37	32	33	33	36	23	12	-1	-3	-5	9	23.4
Indian Mills	Maximum	68	50	53	57	45	53	50	54	45	28	38	28	28	30	36	50	....	....	....	....	48	57	56	68	60	40	33	28	25	20	54	44.5[d]
	Minimum	34	14	39	43	35	42	25	21	25	12	23	14	9	22	18	36	....	....	....	....	36	30	30	29	40	24	15	6	3	0	16	23.2[d]
Lakewood	Maximum	63	48	49	55	43	54	45	50	38	28	37	27	28	29	35	46	46	50	47	46	46	56	53	61	58	36	27	25	20	16	45	42.2
	Minimum	36	17	37	38	37	41	27	25	27	11	18	15	10	22	18	34	36	39	25	33	35	34	35	30	32	27	15	6	1	-3	16	25.0
Moorestown	Maximum	49	49	53	52	44	50	46	82	40	27	37	25	25	30	36	45	39	50	43	41	44	59	55	61	56	32	26	25	14	20	44	40.9
	Minimum	23	20	39	38	34	38	28	27	15	13	18	16	14	20	22	36	37	31	25	34	36	32	36	33	29	23	9	9	2	-1	20	24.4
Pemberton	Maximum	65	48	51	55	44	51	48	51	41	33	40	25	27	30	36	46	45	51	45	45	46	54	53	63	58	36	27	24	21	12	45	42.5
	Minimum	36	19	38	40	35	42	28	24	25	12	13	15	11	21	19	35	36	37	24	31	36	31	38	31	36	23	14	4	2	-1	12	24.7
Pleasantville§§	Maximum	52	50	57	57	51	58	48	53	40	38	40	33	32	33	45	37	49	55	49	53	50	59	51	59	52	42	39	33	17	36	58	46.0
	Minimum	35	16	25	49	35	37	25	22	26	11	12	12	9	16	18	29	41	41	24	27	37	30	31	32	40	24	17	10	5	1	....	26.8[a]
Runyon	Maximum	50	44	50	42	48	50	50	49	39	32	34	32	28	31	27	42	44	51	52	54	54	48	48	54	58	28	25	22	19	10	48	40.7
	Minimum	21	9	33	37	32	32	18	17	24	10	17	12	0	11	5	26	24	15	18	26	26	24	24	26	24	16	14	-18	-2	-5	10	16.6
Trenton	Maximum	49	50	50	49	43	49	43	50	38	27	37	24	27	30	33	45	39	47	43	39	45	57	51	56	57	32	26	24	15	14	42	39.7
	Minimum	28	22	41	37	35	38	31	30	18	13	19	15	18	20	19	33	36	34	29	34	34	33	35	36	32	21	10	6	-1	-2	14	24.8
Tuckerton	Maximum	72	52	58	50	50	46	50	50	54	42	35	30	40	32	40	48	46	48	50	50	50	50	50	60	50	48	40	40	30	18	47	46.0
	Minimum	48	28	39	39	38	34	32	44	38	12	18	12	20	20	28	33	34	34	34	36	34	36	38	40	32	34	14	14	7	4	12	28.6
Philadelphia, Pa	Maximum	51	48	56	57	46	52	45	51	46	29	39	26	29	33	40	51	46	53	43	42	42	61	56	60	56	36	30	26	18	21	44	43.2
	Minimum	32	29	44	42	38	41	35	35	18	16	20	19	24	25	26	39	39	40	35	37	39	37	43	39	36	24	16	14	3	3	19	29.3
The Sea Coast.																																	
Asbury Park	Maximum	60	48	50	52	43	54	45	50	42	27	38	24	30	33	36	46	45	48	48	48	48	56	51	52	58	40	28	24	23	17	40	42.1
	Minimum	31	22	42	39	37	43	30	31	27	12	19	15	12	23	27	35	38	38	30	35	35	34	37	36	34	25	15	8	-1	-1	15	26.5
Atlantic City	Maximum	52	50	53	57	48	56	46	51	44	27	40	28	32	32	47	56	49	54	47	52	49	58	50	51	58	41	30	32	23	30	46	44.8
	Minimum	31	28	46	40	38	42	33	36	19	14	20	17	21	25	25	43	42	36	32	40	40	38	42	45	32	28	16	14	3	3	30	29.6
Long Branch	Maximum	50	47	51	49	42	52	44	48	39	25	35	24	29	31	38	45	45	48	49	45	47	56	45	55	55	38	27	23	14	14	40	40.3
	Minimum	32	19	38	36	34	37	29	28	20	13	18	14	14	20	27	36	37	31	27	31	35	33	32	34	31	23	7	4	-1	-1	14	24.3
Sandy Hook	Maximum	48	48	51	48	42	49	42	48	43	26	36	24	28	29	35	42	40	45	43	42	45	53	42	53	54	35	27	24	16	15	39	39.1
	Minimum	28	27	43	37	36	39	35	35	22	15	20	17	21	24	23	34	35	34	32	35	36	36	38	37	34	24	14	11	-1	2	15	27.0

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged o the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

51.63
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24

NEW JERSEY SECTION,

LIBRARY
JUN 28 1934

H. O. GEREN.
TRENTON, N. J.

VOL. XXXVIII. ANNUAL SUMMARY, 1933. No. 13

GENERAL SUMMARY.

In general the first six months of the year, with the exception of March, were above the normal, while the latter six, except for September, were below normal; the year, as a whole, averaged a little above the normal. Both January and February were mild, in continuance of the mild winter which was in progress at the close of 1932. January was the third mildest on record. The Spring was cold and wet, with late killing frosts at only a few stations, the average date being about the normal. Seeding operations were ten days to two weeks late at the close of April, but May and June were good growing months and much of the backwardness was recovered by the end of June. The Summer was mostly warm, the early part being dry and the late Summer wet. Early Fall came in wet and cool while the late portion was dry and cold, November averaging the coldest since 1917. The closing month was cold and with the lowest temperatures in fifteen years. Nearly all stations, except those along the Sea Coast and a few in the interior, experienced temperatures below zero during the last few days of the year.

The last killing frosts in Spring were recorded rather generally on April 28th, except in the Sea Coast district where they occurred about one month later. The average date for the State was April 24th and this is close to the normal date. In the Fall the first killing frosts came in October, on the 14th, 15th and the 25th, 26th, the average for the State being October 22d. This average date is about a week later than the normal, and gave a growing season of 181 days for the State as a whole.

While the total precipitation for the year was the heaviest since 1920 and was well above the normal, seven of the twelve months experienced a deficiency. The heavy rains in August determined the character of the year if judged solely from the annual total. In that month, which proved to be the wettest August on record and the second wettest of any month, the State average was 10.53 inches. One station, Pleasantville, had a monthly total of 15.15 inches. At Atlantic City, 8.16 inches fell during a 24-hour period on the 21st-22d. Crops had an ample supply of moisture throughout the growing season, except for about two weeks during late June. Generally good harvesting weather prevailed in the Fall. Snowfall was generally light during January and March, and moderately heavy in February and December, with minor amounts in April and November. The annual State average was 21.5 inches but there was, as usual, a wide difference in the amounts received by the various sections. These annual totals ranged from only six or eight inches in the extreme southern portion to 45 to 50 inches in the Highlands.

Northeast gales did considerable damage in the Delaware Bay section during January 26-28th. Severe thunderstorms were responsible for wind damage on May 3d and 24th; on the latter date the loss was about one million dollars. Also, on the 7th and 10th of June there was considerable damage by wind in various parts of the State. A tropical storm inflicted large losses, estimated at around three million dollars, during August 23d-24th; most of the damage was to crops by wind and flooding.

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature			Average precipitation	Average snowfall
	Mean	Highest	Lowest		
1885	50.4	100	−2	37.87	......
1886	50.8	98	−10	46.54	......
1887	51.3	102	−6	47.66	......
1888	50.2	99	−12	52.20	......
1889	52.8	95	−3	**63.33**	......
1890	53.1	101	0	49.34	......
1891	53.2	102	1	47.98	......
1892	51.5	105	−6	42.04	......
1893	50.7	103	−21	47.90	......
1894	53.0	106	−11	47.37	......
1895	51.5	**109**	−12	37.29	25.7
1896	52.1	105	−15	42.51	39.5
1897	52.0	102	−6	51.72	25.8
1898	53.1	107	−15	52.35	34.3
1899	52.1	103	−21	45.84	44.3
1900	53.8	104	−9	42.71	23.3
1901	51.3	107	−8	51.80	14.1
1902	51.9	100	−11	59.44	40.1
1903	51.7	100	−16	56.25	22.3
1904	**49.2**	100	**−34**	43.78	48.5
1905	51.2	102	−18	42.06	32.9
1906	52.7	98	−15	46.38	23.4
1907	50.3	96	−22	51.65	54.1
1908	52.6	106	−17	42.58	35.3
1909	51.9	100	−15	40.86	29.9
1910	51.8	99	−15	39.73	33.3
1911	52.6	104	−12	50.36	30.0
1912	51.3	100	−32	46.61	35.1
1913	54.0	100	−11	46.99	5.2
1914	51.2	99	−12	39.23	41.1
1915	52.4	98	−3	47.37	39.4
1916	51.0	100	−18	38.17	49.6
1917	49.5	104	−21	40.80	40.4
1918	51.6	108	−16	37.65	25.3
1919	52.6	103	−12	52.10	10.9
1920	51.2	98	−17	51.87	33.4
1921	54.2	100	−5	38.16	23.0
1922	52.6	98	−11	41.57	30.8
1923	51.9	106	−14	40.38	39.8
1924	50.6	102	−6	44.17	24.3
1925	52.2	103	−20	42.15	26.8
1926	50.0	105	−11	44.41	32.2
1927	52.0	99	−12	49.68	13.7
1928	52.0	99	−15	46.22	21.5
1929	52.3	102	−9	42.96	16.0
1930	52.7	105	−14	**35.28**	15.6
1931	**54.4**	102	−9	37.07	8.6
1932	53.4	100	−6	46.80	16.3
1933	52.9	105	−18	49.80	21.5

MONTHLY STATE DATA FOR 1933

Month	Temperature				Precipitation					
	Mean	Departure from normal	Highest	Lowest	Average	Departure from normal	Greatest	Least	Snow	Greatest.
January	38.5	+8.8	67	2	2.39	−1.27	4.45	1.38	1.2	10.5
February	33.5	+2.8	67	−12	3.33	−0.28	4.72	2.20	10.4	14.8
March	38.2	−0.9	70	8	4.95	+1.17	6.40	2.59	1.7	6.3
April	50.4	+0.7	85	20	4.84	+1.23	7.09	3.52	0.2	2.5
May	63.2	+2.8	93	32	4.84	+1.11	6.98	2.56	0.0	0
June	71.0	+2.2	105	32	2.79	−0.92	5.71	0.52	0.0	0
July	73.4	−0.3	105	41	3.73	−1.06	6.05	1.20	0.0	0
August	72.7	+0.9	101	45	10.53	+5.78	15.15	6.45	0.0	0
September	68.0	+2.1	93	38	6.16	+2.60	10.86	2.70	0.0	0
October	53.6	−1.1	84	18	2.04	−1.37	3.37	0.85	T.	T.
November	40.6	−3.0	78	7	1.01	−2.17	1.89	0.08	0.6	5.0
December	31.8	−1.9	72	−18	3.19	−0.46	5.77	2.12	7.4	15.3
Year	52.9	+1.1	105	−18	49.80	+4.36	15.15	0.08	21.5	15.3

KILLING FROSTS

Stations	Last in spring	First in autumn
The Highlands and Kittatinny Valley		
Belvidere	Apr. 28*	Oct. 26
Charlotteburg	do. 27*	do. 15*
Culvers Lake	do. 28*	do. 14
Dover	do. 28	do. 15
Layton	May 8	do. 14
Long Valley	Apr. 28*	do. 15*
Newton	do. 28	do. 26
Phillipsburg	do. 28*	do. 26
Sussex	do. 28*	do. 14*
The Red Sandstone Plain		
Boonton	Apr. 28*	Oct. 15*
Canoe Brook	May 5*	do. 14*
Elizabeth	Apr. 28*	do. 26*
Flemington	do. 28	do. 26
Jersey City	do. 23*	do. 26
Lambertville	do. 28	do. 26
Little Falls	do. 28	do. 14
New Brunswick	do. 27*	do. 26
Paterson	do. 28*	do. 26
Plainfield	do. 28	do. 15
Ridgefield	do. 27*	do. 14
Somerville	do. 28	do. 26*
The Southern Interior		
Belleplain	Apr. 28	Oct. 25
Bridgeton	do. 27*	do. 26
Burlington	do. 23*	do. 26*
Camden	Mar. 25	do. 26
Freehold	Apr. 27	do. 26
Hammonton	do. 23*	....
Hightstown	do. 27*	Oct. 26
Indian Mills	do. 28*	do. 26
Lakewood	do. 28	do. 26*
Moorestown	do. 23	do. 25
Pemberton	do. 27*	do. 26
Pleasantville	do. 28*	do. 15
Runyon	do. 29*	do. 14*
Trenton	do. 23	do. 26*
Tuckerton	do. 27*	do. 26*
The Sea Coast		
Asbury Park	Mar. 30*	Oct. 26*
Atlantic City	do. 29*	do. 26
Long Branch	do. 30*	do. 26
Sandy Hook	do. 24*	do. 26

* No frost reported; temperature 32° or below.

W. B. O. Philadelphia-3-14-34 1050

Climatological Data for the Year 1933

STATION	Counties	Elevation, feet	Temperature (degrees Fahrenheit)						Precipitation (inches)							Number days with .01 or more	Sky			Prevailing direction of wind
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall (unmelted)		Number clear days	Number partly cloudy days	Number cloudy days	
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	42	52.8	102	June 9*	−6	Feb. 13	42	48.01	10.30	Aug.	0.08	Nov.	23.3	......	189	39	137	......
Charlotteburg	Passaic	719	41	50.8	100	Aug. 1	−17	Dec. 29	41	51.91	11.45	do.	0.55	do.	34.3	119	209	79	83	n.
Culvers Lake	Sussex	848	......	......	......	......	−16	do. 30	32	46.16	8.66	Sept.	0.62	do.	50.8	90	204	79	82	s.
Dover	Morris	600	49	50.4	100	July 31	−8	do. 30	49	48.22	8.75	Aug.	0.57	do.	34.1	125	69	168	128	......
Layton	Sussex	480	32	49.5	101	July 31	−14	Dec. 29	32	47.52	9.78	Aug.	0.54	Nov.	45.3	108	113	63	189	sw.
Long Valley	Morris	520	3	50.5	98	do. 31	−12	Feb. 13	3	46.75	10.66	do.	0.60	do.	......	107	181	60	124	w.
Newton	Sussex	769	50	51.6	105	do. 31	−14	Dec. 30	47	49.80	11.17	do.	0.67	do.	42.2	111	129	93	143	sw.
Phillipsburg	Warren	363	42	50.3	102	do. 31	−6	Feb. 13	50	54.13	13.70	do.	0.64	do.	22.2	121	170	75	120	......
Sussex	Sussex	442	35	51.0	99	do. 31†	−12	Dec. 30	38	45.25	8.78	do.	0.24	do.	29.6	113	170	70	125	......
Means and extremes	......	......	......	50.9	105	July 31	−17	Dec. 29	......	48.64	13.70	Aug.	0.08	Nov.	35.2	112	159	81	125	sw.
The Red Sandstone Plain.																				
Boonton	Morris	400	25	51.2	98	July 31	−10	Dec. 30	43	47.98	9.74	Aug.	0.30	Nov.	......	111	158	39	168	ne.
Canoe Brook	Essex	173	3	50.7	100	Aug. 1	−16	do. 28	3	50.37	9.66	Sept.	0.67	do.	......	114	180	71	114	w.
Chatham	Morris	185	......	......	......	......	......	......	29	60.08	10.09	do.	1.37	do.	......	145	182	78	105	......
Elizabeth	Union	45	49	54.4	105	June 10	−6	Dec. 30	54	48.22	8.56	Aug.	0.84	do.	24.0	131	188	72	105	nw.
Flemington	Hunterdon	140	36	53.7	101	July 31	−9	Feb. 13	47	49.32	10.56	Aug.	0.88	Nov.	25.0	127	207	63	95	w.
Jersey City	Hudson	10	35	53.9	102	do. 31	−6	Dec. 30	35	49.36	8.94	do.	0.85	do.	29.6	124	109	129	127	nw
Lambertville	Hunterdon	430	46	52.2	98	do. 31	−5	do. 29†	46	51.51	12.33	do.	0.91	do.	34.3	124	181	61	123	sw.
Little Falls	Passaic	180	19	52.7	103	do. 31	−9	do. 30	30	58.37	11.13	do.	0.58	do.	24.4	140	191	54	120	nw.
New Brunswick	Middlesex	110	76	53.0	99	July 30†	−5	Dec. 30	80	46.95	9.62	Aug.	0.86	Nov.	23.3	121	178	104	83	nw.
New Milford	Bergen	40	......	......	......	......	......	......	15	51.27	8.97	do.	0.80	do.	......	123	......	......	......	......
Paterson	Passaic	80	63	53.4	103	July 31	−9	Dec. 30	63	53.85	10.16	do.	0.64	do.	27.3	136	140	95	130	w
Plainfield	Union	120	42	52.3	101	do. 31	−7	do. 30	45	49.55	7.93	do.	0.93	do.	24.6	133	106	131	128	nw.
Ridgefield	Bergen	80	16	52.3	100	July 31	−9	Dec. 30	16	52.47	10.33	Sept.	0.96	Nov.	30.8	126	130	112	123	nw.
Somerville	Somerset	70	48	......	......	......	......	......	50	45.43	9.37	Aug.	0.27	do.	......	......	......	......	......	......
Woodcliff Lake	Bergen	100	......	......	......	......	......	......	15	53.88	10.36	do.	0.78	do.	......	134	......	......	......	......
New York, N.Y.	......	314	63	53.6	100	July 31	−6	Dec. 30	63	49.68	9.21	Aug.	0.85	Nov.	28.3	129	96	110	159	nw.
Means and extremes	......	......	......	52.7	105	June 10	−16	Dec. 28	......	51.24	12.33	Aug.	0.27	Nov	27.0	128	163	84	118	nw.
The Southern Interior.																				
Belleplain	Cape May	30	38	53.9	98	July 31	2	Dec. 30	39	44.47	8.20	Aug.	0.52	June	......	94	123	84	158	nw.
Bridgeton	Cumberland	30	45	54.9	99	Aug. 1	1	do. 29	50	47.11	9.75	do.	0.85	Oct.	12.0	99	214	57	94	sw.
Burlington	Burlington	12	21	55.5	101	do. 1	−1	Feb. 13†	47	54.85	13.46	do.	1.00	Nov.	20.0	96	192	95	78	sw.
Camden	Camden	20	2	54.8	102	June 9	0	Dec. 30	1	48.47	9.37	do.	1.00	do.	18.2	127	125	123	117	nw.
Freehold	Monmouth	194	2	53.2	100	July 31	−5	do. 30	29	49.90	8.51	do.	1.55	do.	21.0	118	205	57	103	w.
Hightstown	Mercer	146	38	......	101	July 31	−5	Dec. 30	40	48.78	9.96	Aug.	1.25	Nov.	25.5	112	......	......	......	......
Indian Mills	Burlington	76	44	54.4	101	do. 31	0	do. 30	43	56.84	14.35	do.	1.27	Oct.	16.1	112	132	121	112	nw.
Lakewood	Ocean	54	29	53.4	98	Aug. 1	−3	do. 30	29	45.85	10.91	do.	1.02	June	16.9	128	164	73	128	nw.
Moorestown	Burlington	62	70	53.5	97	July 31	−1	do. 30	70	52.68	11.50	do.	1.31	Nov.	15.8	130	117	130	118	nw.
Northfield	Atlantic	25	......	......	......	......	......	......	26	48.13	12.44	do.	0.68	June	9.6	109	......	......	......	......
Pemberton	Burlington	60	3	54.7	99	June 9	−1	Dec. 30	3	47.06	12.77	do,	1.36	Oct.	15.9	119	172	69	124	w.
Pleasantville	Atlantic	11	10	53.7	97	July 31†	1	Dec. 30	35	53.98	15.15	Aug.	0.79	June	......	128	203	71	91	s.
Port Norris	Cumberland	10	1	......	......	......	......	......	1	50.10	12.76	do.	1.42	Oct.	8.0	84	160	116	89	nw.
Runyon	Middlesex	18	9	51.7	103	July 31	−18	Dec. 28	10	49.69	8.28	do.	1.06	Nov.	......	100	197	108	60	w.
Trenton	Mercer	190	61	53.6	99	June 9	−2	do. 30	61	45.79	10.09	do.	1.08	do.	22.8	136	104	124	137	s.
Trenton No. 2	Mercer	105	......	......	......	......	......	......	5	53.52	11.44	do.	1.11	do.	25.7	136	......	......	......	......
Tuckerton	Ocean	23	35	54.9	96	Aug. 1†	−4	Dec. 30	40	46.13	14.19	do.	0.75	June	5.5	122	154	98	113	nw.
Philadelphia, Pa.	......	114	62	56.4	99	July 31	3	Dec. 30	62	51.37	9.84	Aug.	1.07	Nov.	17.8	125	114	100	151	sw.
Means and extremes	......	......	......	54.0	103	July 31	−18	Dec. 28	......	49.61	15.15	Aug.	0.52	June	16.6	115	161	95	109	nw.
The Sea Coast.																				
Asbury Park	Monmouth	22	43	53.8	97	July 30	−1	Dec. 29†	44	47.23	9.65	Aug.	0.97	June	16.5	129	214	83	68	nw.
Atlantic City	Atlantic	16	60	54.9	94	do. 31	3	do. 30	60	51.27	14.50	do.	1.64	Oct.	11.5	125	109	99	157	w.
Long Branch	Monmouth	25	25	52.5	100	Aug. 1	−1	do. 29	25	47.52	9.63	do.	1.12	Nov.	19.6	135	124	106	135	nw.
Sandy Hook	Monmouth	22	35	53.3	99	July 31	−1	do. 29	35	42.12	6.45	do.	1.24	do.	18.7	143	113	105	147	w.
Means and extremes	......	......	......	53.6	100	Aug. 1	−1	Dec. 29†	......	47.04	14.50	Aug.	0.97	June	16.6	133	140	98	127	nw.
For the State	......	......	......	52.9	105	June 10†	−18	Dec. 28	......	49.80	15.15	Aug.	0.08	Nov.	21.5	121	158	88	119	nw.

† Also on other dates.

Monthly and Annual Precipitation for the Year 1933, with Departures from the Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	1.82	−1.72	3.15	−0.69	6.34	+2.49	5.02	+1.36	5.14	+1.31	1.82	−2.18	3.03	−1.95	10.30	+5.69	6.28	+2.51	2.26	−1.41	0.08	−3.16	2.77	−1.30	48.01	+0.95
Charlotteburg	1.85	−1.70	3.17	−0.85	5.19	+0.99	5.95	+1.63	3.71	−0.49	2.83	−1.29	4.10	−0.73	11.45	+6.83	7.56	+3.14	2 30	−2.17	0.55	−2.97	3.25	−1.08	51.91	+1.31
Culvers Lake	1.64	−1.54	2.99	−0.07	4.88	+1.41	4.78	+0.96	2.56	−1.07	1.95	−2.66	3.75	−0.82	8.63	+4.21	8.66	+4.12	3.37	−0.81	0.62	−2.18	2.33	−1.33	46.16	+0.22
Dover	2.17	−2.22	4.21	+0.18	4.71	+0.72	5.21	+1.45	4.83	+0.89	2.22	−1.81	3.65	−1.62	8.75	+3.99	6.56	+2.47	2.37	−1.70	0.57	−3.07	2.97	−1.33	48.22	−2.05
Layton	2.20	−0.69	3.20	+0.46	4.86	+1.49	5.15	+1.54	3.25	0.0	2.26	−1.53	2.68	−1.58	9.78	+5.88	8.46	+4.54	3.02	−0.60	0.54	−1.95	2.12	−1.82	47.52	+5.74
Long Valley	1.58	......	3.19	......	4.70	......	5.27	......	4.29	......	1.14	......	2.75	......	10.66	......	7.02	......	2.62	......	0.60	......	2.93	......	46.75	....
Newton	2.78	−0.83	2.79	−0.77	5.30	+1.73	4.71	+1.34	3.47	−0.46	2.26	−1.72	1.20	−3.76	11.17	+6.75	9.36	+5.55	2.82	−0.81	0.67	−2.46	3.27	−0.44	49.80	+4.12
Phillipsburg	1.75	−1.85	3.75	+0.11	6.00	+2.46	4.94	+1.68	5.64	+1.78	3.69	+0.06	2.73	−2.12	13.70	+9.08	6.64	+2.98	1.99	−1.57	0.64	−2.56	2.66	−1.08	54.13	+8.97
Sussex	1.75	−1.73	2.20	−1.18	4.01	+0.42	4.88	+1.44	3.35	−0.37	4.58	+0.90	3.35	−1.05	8.78	+4.52	6.83	+2.93	2.66	−0.78	0.24	−3.01	2.62	−0.94	45.25	+1.15
The Red Sandstone Plain.																										
Boonton	1.58	−2.25	3.20	−0.77	4.07	+0.13	5.06	+1.07	4.55	+0.49	2.95	−0.72	3.31	−1.59	9.74	+4.66	7.77	+3.64	3.30	−0.61	0.30	−3.27	2.15	−1.83	47.98	−1.05
Canoe Brook	1.87	......	3.35	......	4.85	......	4.93	......	4.97	......	3.40	......	3.40	......	8.57	......	9.66	......	1.91	......	0.67	......	2.79	......	50.37	....
Chatham	2.65	−1.04	4.26	+0.83	6.04	+2.30	6.62	+2.52	5.46	+1.96	4.16	+0.10	3.80	−0.64	9.79	+5.38	10.09	+5.80	2.37	−1.84	1.37	−1.53	3.47	−0.70	60.08	+13.14
Elizabeth	1.38	−2.66	3.15	−1.02	4.65	+0.43	4.39	+0.71	4.47	+0.65	2.58	−1.04	5.98	+0.82	8.56	+4.27	7.19	+3.42	1.25	−2.64	0.84	−2.41	3.78	−0.18	48.22	+0.35
Flemington	1.78	−1.91	3.14	−0.40	5.26	+1.37	4.49	+0.97	6.26	+2.24	2.00	−1.84	4.47	−0.75	10.56	+5.85	5.46	+1.56	2.44	−1.22	0.88	−2.24	2.58	−1.18	49.32	+2.45
Jersey City	1.58	−1.92	2.99	−0.73	5.91	+1.76	4.69	+0.53	5.39	+1.81	2.35	−1.15	3.10	−1.34	8.94	+4.41	8.11	+4.76	2.04	−1.64	0.85	−2.34	3.41	−0.52	49.36	+3.63
Lambertville	1.68	−1.97	2.87	−0.61	5.12	+1.09	4.60	+1.02	6.49	+2.47	2.98	−0.93	4 64	−0.18	12.33	+7.67	4.81	+0.92	2.03	−1.45	0.91	−2.30	3.05	−0.82	51.51	+4.91
Little Falls	1.71	−1.99	3.09	−0.38	4.93	+1.34	7.09	+2.97	4.28	+0.49	3.03	−0.49	5.31	+0.92	11.13	+6.73	10.86	+7.28	3.25	−1.26	0.58	−2.32	3.11	−0.98	58.37	+12.31
New Brunswick	1.77	−2.02	2.78	−0.84	5.32	+1.51	4.30	+0.56	6.80	+2.91	2.85	−0.91	3.12	−1.92	9.62	+4.47	5.26	+1.66	1.76	−1.82	0.86	−2.62	2.51	−1.16	46.95	−0.18
New Milford	1.92	......	3.04	......	5.50	......	5.58	......	3.72	......	4.24	......	4.47	......	8.97	......	7.15	......	2.90	... ..	0.80	......	2.98	.....	51.27	....
Paterson	2.09	−1.76	4.07	−0.14	5.78	+1.40	5.89	+2.33	3.14	−1.30	2.62	−1.50	5.14	+0.12	10.16	+5.43	8.13	+4.00	2.81	−1.28	0.64	−2.53	3.38	−0.68	53.85	+4.09
Plainfield	1.62	−2.40	3.10	−0.86	4.74	+0.47	4.64	+0.74	5.66	+1.74	4.93	+1.19	4.58	−1.25	7.93	+3.72	6.61	+2.24	1.98	−2.17	0.93	−2.44	2.83	−1.23	49.55	−0.25
Ridgefield	1.76	......	3.22	......	5.65	......	5.49	. . ..	4.67	......	3.20	......	2.82	......	8.76	......	10.33	......	2.60	......	0.96	......	3.01	......	52.47	....
Somerville	1.53	−2 19	2.95	−0.83	4.40	+0.44	4.44	+0.95	5.98	+2.13	2.66	−1.08	*4.06	−1.05	*9.37	+4.43	*5.78	+2.13	1.69	−1.75	0.27	−2.77	2.30	−1.55	45.43	−1.14
Woodcliff Lake	2.13	......	3.01	. ....	5.75	......	5.86	......	3.65	......	4.75	......	4.25	......	10.36	......	6.80	......	2.99	......	0.78	......	3.55	......	53.88	....
New York, N. Y	1.53	−2.13	2.98	−0.84	5.89	+2.25	4.49	+1.26	5.93	+2.69	2.55	−0.78	2.77	−1.47	9.21	+4.88	8.17	+4.78	1.98	−1.55	0.85	−2.11	3.33	−0.29	49.68	+6.69
The Southern Interior.																										
Belleplain	*4.05	+0.52	2.95	−0.64	2.69	−1.01	4.70	+1.05	4.47	+0.65	0.52	−2.70	5.62	+1.51	8.20	+3.90	3.50	+0.11	1.38	−2.04	1.65	−0.96	4.74	+0.79	44.47	+1.18
Bridgeton	3.86	+0.34	2.96	−0.86	4.07	−0.11	4.18	+0.66	3.22	−0.62	2.80	−0.93	6.05	+1.56	9.75	+5.16	3.95	+0.64	0.85	−2.74	1.77	−1.03	3.65	−0.17	47.11	+1.90
Burlington	2.34	−1.06	3.74	+0.24	6.15	+2.44	5.40	+1.70	5.02	+0.81	4.20	+0.32	2.41	−2.33	13.46	+8.01	5.75	+2.24	1.43	−2.22	1.00	−2.11	3.95	−0.37	54.85	+7.67
Camden	2.73	......	2.76	......	4.47	......	5.02	......	6.98	... ..	3.72	......	5.44	......	9.37	......	2.77	......	1.59	......	1.00	......	2.62	... ..	48.47	....
Freehold	2.33	−1.66	3.96	−0.06	6.02	+1.37	4.51	+0.87	4.93	+1.09	2.48	−1.15	2.55	−2.67	8.51	+3.80	4.92	+0.63	2.37	−1.15	1.55	−2.47	5.77	+2.05	49.90	+0.65
Hammonton	3.55	−0.24	3.02	−0.39	4.33	−0.74	4.26	+0.34	4.28	0.0	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	....
Hightstown	2.41	−0.86	3.49	−0.11	5.56	+1.52	4.10	+0.19	5.19	+1.24	2.64	−0.96	2.81	−2.18	9.96	+5.38	6.07	+2.94	1.72	−1.99	1.25	−2.06	3.58	−0.11	48.78	+3.00
Indian Mills	3.71	−0.11	3.93	+0.48	5.33	+1.30	4.59	+1.16	5.31	+2.07	5.30	+1.17	4.86	+0.20	14.35	+8.42	3.68	−0.23	1.27	−2.17	1.84	−1.24	2.67	−1.73	56.84	+9.32
Lakewood	1.93	−1.75	3.48	−0.09	5.38	+1.40	4.57	+0.90	3.99	+0.59	1.02	−2.69	3.39	−1.46	10.91	+4.86	4.26	+1.97	1.54	−2.05	1.63	−0.83	3.25	−1.39	45.85	−0.54
Moorestown	2.83	−0.63	3.12	−0.36	5.12	+1.36	4.71	+1.42	5.85	+1.83	2.95	−0.77	5.81	+1.13	11.50	+6.61	4.41	+0.78	1.42	−2.15	1.31	−1.94	3.65	−0.04	52.68	+7.24
Northfield	3.65	+0.12	4.35	+1.56	3.10	−0.39	3.97	+0.51	5.14	+1.67	0.68	−2.99	3.49	−0.11	12.44	+8.09	4.17	+1.67	1.37	−1.41	1.79	−0.59	3.98	−0.14	48.13	+7.99
Pemberton	2.57	......	3.22	......	4.72	...	4.72	......	5.21	......	1.72	......	3.80	......	12.77	......	2.70	......	1.36	......	1.43	......	2.84	......	47.06	....
Pleasantville	4.32	+0.16	4.44	+1.63	3.52	+0.05	4.37	+1.02	5.56	+2.30	0.79	−3.14	4.12	+0.14	15.15	†	4.17	+1.05	1.48	−1.96	1.83	−0.89	4.23	−0.01	53.98	+10.57
Port Norris	4.45	......	3.87	......	2.59	......	5.19	......	4.68	......	2.14	......	3.64	......	12.76	......	4.01	......	1.42	......	1.86	......	3.49	......	50.10	....
Runyon	1.91	......	2.81	......	5.59	.....	4.19	......	6.12	......	5.71	......	3.06	......	8.28	......	5.55	......	1.63	......	1.06	......	3.78	....	49.69	....
Trenton	1.93	−1.38	2.66	−0.61	5.59	+2.19	4.40	+1.46	4.91	+1.83	2.93	−0.16	3.42	−0.52	10.09	+5.34	4.86	+1.46	1.30	−1.48	1.08	−1.65	2.62	−0.73	45.79	+5.75
Trenton No. 2	2.11	......	3.24	......	5.70	......	5.59	......	5.77	......	4.04	......	4.78	......	11.44	......	5.19	......	1.63	......	1.11	......	2.92	......	53.52	....
Tuckerton	3.90	+0.27	3.49	−0.17	2.77	−1.48	3.52	−0.22	5.55	+1.81	0.75	−3.08	3.53	−0.35	14.19	+8.65	3.36	+0.30	1.45	−2.08	0.86	−2.22	2.76	−1.75	46.13	−0.32
Philadelphia, Pa	2.66	−0.64	3.19	−0.13	4.86	+1.47	5.26	+2.21	6.93	+3.67	4.78	+1.54	4.70	+0.55	9.84	+5.22	4.17	+1.03	1.39	−1.42	1.07	−1.63	2.52	−0.91	51.37	+10.96
The Sea Coast.																										
Asbury Park	2.64	+0.93	4.04	+0.54	6.40	+2.17	4.22	+0.53	4.89	+1.31	0.97	−2.65	2.10	−2.44	9.65	+4.59	6.19	+3.20	1.30	−2.41	1.23	−1.69	3.60	−0.25	47.23	+1.97
Atlantic City	3.37	−0.12	4.72	+1.36	3.44	−0.16	3.79	+0.80	4.32	+1.27	1.84	−1.20	2.80	−1.13	14.50	‡	4.71	+2.06	1.64	−1.56	1.89	−0.93	4.25	+0.31	51.27	+10.71
Long Branch	2.01	−2.17	3.49	−0.42	6.29	+1.95	4.19	−0.36	5.31	+1.55	2.49	−1.31	2.53	−2.39	9.63	+3.50	5.79	+2.73	1.79	−2.26	1.12	−2.40	2.88	−1.86	47.52	−3.44
Sandy Hook	1.92	−2.04	2.55	−1.20	4.79	+0.75	4.47	+0.85	4.93	+1.21	4.59	+0.81	2.28	−2.84	6.45	+1.47	5.17	+1.74	1.29	−2.49	1.24	−2.01	2.44	−1.60	42.12	−5.35

* Interpolated from surrounding stations. † +10.22 ‡ +10.01

Monthly and Annual Mean Temperatures for the Year 1933, with Departures from the Normal

STATIONS.	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	36.0	+8.7	31.8	+4.7	38.6	+0.5	51.8	+2.0	[b]64.8	+4.1	[c]73.0	+4.2	74.6	+1.4	[a]72.7	+1.7	[f]67.8	+3.1	53.6	−0.2	39.2	−1.9	29.4	−1.2	52.8	+2.
Charlotteburg	36.1	+9.2	31.6	+6.0	35.0	−0.8	49.4	+2.6	61.4	+3.9	69.5	+4.7	[g]72.5	+2.5	70.2	+2.3	65.9	+4.0	49.9	−1.7	36.8	−3.3	31.8	+2.0	50.8	+2.
Dover	35.8	+9.2	[b]30.1	+3.9	35.4	+0.2	48.8	+1.4	61.6	+3.0	69.5	+2.8	72.2	+0.8	70.4	+1.3	[b]65.2	+3.0	50.4	−0.9	[a]37.2	−2.9	[a]27.8	−2.1	50.4	+1.
Layton	33.4	+8.7	28.4	+4.8	34.1	−1.5	49.0	+1.8	61.1	+3.1	69.2	+3.7	71.6	+0.7	70.3	+1.9	64.6	+2.3	50.2	−1.3	35.6	−3.2	27.0	−0.4	49.5	+1.
Long Valley	35.4	......	30.2	......	35.8	......	49.3	......	61.2	......	69.4	......	71.0	......	70.1	......	66.4	......	51.3	......	38.1	......	29.2	......	50.5	......
Newton	37.4	+11.7	31.6	+5.1	37.4	+1.9	50.8	+2.8	61.8	+2.3	70.8	+2.2	73.6	+1.1	71.2	+0.8	67.4	+3.9	51.7	−1.0	37.3	−3.2	27.8	−2.3	51.6	+2.
Phillipsburg	34.2	+6.1	28.0	+0.1	35.0	−3.1	47.0	−2.9	69.9	−1.4	68.8	−0.5	71.2	−2.9	[f]71.7	−0.1	67.0	+1.8	51.9	−2.0	38.6	−2.6	30.2	−1.1	50.3	−0.
Sussex	[a]34.2	+7.6	30.1	+4.7	35.2	−1.1	[a]50.0	+1.4	61.7	+1.8	[b]70.4	+3.6	[a]73.5	+1.4	[d]71.6	+1.1	[e]65.6	+1.4	[a]53.4	+0.2	[a]38.0	−3.1	28.4	−1.5	51.0	+1.
The Red Sandstone Plain.																										
Boonton	36.0	+8.7	32.1	+5.0	36.6	0.0	49.6	+0.9	61.6	+2.4	69.7	+2.1	72.0	−0.5	71.0	−0.3	65.4	+1.8	51.0	−1.8	38.6	−2.8	30.5	0.0	51.2	+1.
Canoe Brook	35.5	......	31.5	......	36.6	......	49.0	......	61.2	......	68.2	......	72.0	......	71.0	......	[d]64.8	......	51.2	......	38.6	......	29.2	......	50.7	......
Elizabeth	40.4	+10.2	36.0	+5.5	[a]39.0	+0.2	52.2	+1.4	[a]64.8	+2.8	72.2	+1.7	75.2	−0.1	[a]73.8	+0.4	[e]68.4	+1.7	[b]64.8	−0.6	42.6	−0.9	33.3	0.0	54.4	+1.
Flemington	38.6	+8.8	32.6	+3.8	38.7	−1.4	52.0	+1.6	64.6	+3.3	72.4	+3.2	75.0	+0.4	73.8	+1.3	69.6	+3.3	54.2	−1.8	40.9	−2.0	31.6	−0.4	53.7	+1.
Jersey City	40.0	+7.8	34.2	+3.6	38.4	−0.8	60.8	+0.8	63.2	+1.6	71.6	+0.7	74.6	−1.5	74.2	+0.1	69.2	+2.0	56.0	−0.3	41.8	−2.2	32.8	−1.3	53.9	+0.
Lambertville	38.2	+7.7	32.6	+2.2	37.2	−2.2	50.2	−0.5	62.0	+0.4	70.5	+0.8	73.1	−1.2	71.8	−0.6	67.4	+1.6	52.8	−1.8	39.6	−3.7	30.8	−2.8	52.2	0.
Little Falls	37.6	+9.6	32.8	+3.2	37.4	−0.6	50.6	+0.7	63.6	+3.9	71.4	+3.4	74.4	+0.6	72.8	−0.4	67.5	+3.4	53.6	−1.3	40.2	−2.0	31.0	−0.5	52.7	+1.
New Brunswick	38.8	+8.6	33.7	+2.9	38.1	−0.7	49.8	+0.2	63.5	+3.1	71.0	+1.9	74.2	+0.2	72.9	+0.8	68.3	+2.7	53.8	−1.0	40.9	−2.5	31.2	−2.0	53.0	+1
Paterson	38.8	+9.2	34.0	+3.8	38.2	−0.6	51.4	+0.9	64.4	+2.9	72.1	+2.3	75.0	+0.6	73.2	+1.0	68.3	+2.1	54.6	−0.6	40.3	−3.2	31.0	−2.1	53.4	+1.
Plainfield	37.8	+7.8	32.8	+4.1	37.6	−1.3	49.8	+0.2	62.3	+2.1	70.8	+2.2	73.4	−0.6	72.2	+0.4	67.0	+1.4	52.9	−1.3	39.8	−2.7	31.0	−1.7	52.3	+0.
Ridgefield	37.8	......	32.2	......	37.9	......	49.8	......	63.2	......	70.6	......	72.9	......	72.0	......	67.0	......	52.7	......	40.0	......	31.0	......	62.3	......
Somerville	37.6	+8.8	32.0	+3.1	37.8	−0.4	50.0	+0.5	62.9	+2.1	70.7	+1.6	......	......	......	......	......	......	[c]54.3	0.0	[c]39.8	−2.6	......	......	......	......
New York, N. Y.	40.2	+9.3	33.8	+2.5	38.0	+0.3	50.1	+0.7	62.8	+2.2	70.8	+2.0	73.7	−0.1	73.8	+0.7	68.8	+2.0	65.9	−0.4	41.8	−2.4	32.9	−2.1	53.6	+1.
The Southern Interior.																										
Belleplain	[d]41.4	+8.4	36.7	+5.2	[c]40.4	−0.7	[e]51.1	+0.5	63.4	+2.3	[b]70.6	+1.9	[a]72.2	−1.6	[a]72.8	+0.2	[b]69.8	+3.3	[d]52.6	−3.7	[d]41.9	−2.6	[d]33.6	−1.5	53.9	+1.
Bridgeton	40.6	+6.9	35.8	+2.1	40.2	−2.1	51.9	−0.8	64.8	+0.8	73.1	+1.0	74.4	−2.3	75.0	0.0	70.4	+2.2	[a]55.5	−1.9	42.5	−3.1	34.2	−2.0	54.9	+0
Burlington	40.9	+8.6	35.6	+4.3	40.2	−0.2	53.0	+1.2	66.9	+5.0	74.0	+4.3	75.4	+0.4	75.3	+1.1	70.7	+3.9	56.4	−1.8	43.6	−0.8	34.2	+0.4	55.5	+2.
Camden	40.0	......	34.6	......	40.4	......	52.5	......	65.8	......	74.0	......	75.3	......	74.6	......	70.0	......	55.2	......	41.9	......	33.1	......	54.8	......
Freehold	39.3	......	34.6	......	38.0	......	50.0	......	63.4	......	71.8	......	73.8	......	72.8	......	67.5	......	54.0	......	41.4	......	32.0	......	53.2	......
Hammonton	[f]39.8	......	36.1	......	40.2	......	[b]53.2	......	[e]65.6	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Hightstown	......	......	[c]34.6	+5.2	38.5	−1.9	51.0	+0.5	64.4	+3.1	[a]71.0	+2.0	74.1	−0.3	73.4	+1.1	68.5	+1.7	53.7	−1.5	40.8	−2.5	[a]32.2	−0.4	......	......
Indian Mills	40.6	+8.7	36.2	+4.4	39.6	−0.9	51.9	+1.6	65.2	+3.1	71.8	+2.0	73.8	−0.9	73.4	+0.8	69.2	+3.1	54.4	−1.1	43.3	+0.4	[d]33.8	0.0	54.4	+1
Lakewood	39.8	+8.5	35.2	+5.5	39.2	−0.4	49.8	+0.4	64.2	+4.0	71.6	+4.1	73.3	+0.5	72.4	+1.3	68.0	+3.4	52.9	−2.2	41.4	−1.4	33.6	+0.1	53.4	+2.
Moorestown	39.4	+8.7	33.8	+2.5	39.5	+0.3	51.4	+1.0	64.0	+2.7	71.7	+1.7	73.9	−0.8	72.9	+0.3	68.7	+2.7	53.6	−1.1	41.0	−2.2	32.6	−0.9	53.5	+1.
Pemberton	40.6	......	35.9	......	39.8	......	62.4	......	65 8	......	72.8	......	74.2	......	74.1	......	69.6	......	54.6	......	42.5	......	33.6	......	54.7	......
Pleasantville	39.8	......	35.8	......	40.0	......	50.2	......	62.7	......	70.0	......	[a]72.8	......	73.0	......	69.0	......	54.4	......	41.8	......	[a]35.3	......	63.7	......
Runyon	37.0	......	32.9	......	37.9	......	48.0	......	63.2	......	71.2	......	72.8	......	72.6	......	67.6	......	48.4	......	39.8	......	28.6	......	51.7	......
Trenton	39.6	+9.1	33.3	+2.6	38.6	−0.5	51.0	+1.2	64.2	+3.1	72.0	+2.5	74.1	−0.4	73.5	+0.6	69.0	+2.1	54.2	−1.4	41.6	−2.8	32.2	−2.2	53.6	+1.
Tuckerton	43.6	+11.0	36.8	+6.0	42.0	+2.0	50.2	+0.9	61.8	+1.9	70.0	+1.6	72.3	−1.8	71.4	−1.3	68.0	+1.8	59.9	−3.8	46.0	+1.9	37.3	+2.9	54.9	+1.
Philadelphia, Pa.	42.6	+10.0	36.7	+2.8	41.4	+0.6	53.8	+1.7	66.3	+3.4	74.4	+3.0	76.6	+0.4	76.0	+1.2	71.2	+3.2	57.8	0.0	44.1	−1.6	36.2	−0.1	56.4	+2.
The Sea Coast.																										
Asbury Park	41.7	+9.5	35.2	+3.8	39.4	+0.4	48.6	+0.1	[a]62.2	+3.4	69.3	+1.9	73.2	+0.8	73.2	+1 4	69.6	+2.8	[a]56.1	+0.3	42.8	−2.0	34.3	−0.7	53.8	+1.
Atlantic City	42.5	+10.0	37.2	+3.6	41.0	+2.4	49.3	+1.5	61.2	+3.1	69.8	+3.2	72.4	+0.3	74.5	+2.0	71.6	+4.8	57.7	+0.8	44.7	−0.9	37.2	+0.8	54.9	+2.
Long Branch	38.2	+6.6	33.0	+2.6	38.4	−0.1	48.8	+0.7	62.2	+4.0	70.2	+4.0	73.0	+0.9	72.6	+1.6	67.8	+1.9	53.9	−2.4	39.8	−4.4	32.3	−1.8	52.5	+1.
Sandy Hook	39.8	+8.5	33.6	+1.5	38.2	−1.1	48.2	−0.1	61.6	+3.2	69.6	+1.8	73.4	−0.1	74.1	+1.6	69.4	+1.9	56.4	−0.5	41.8	−4.0	33.0	−2.2	53.3	+0.

Reference letters, as a, b, c., in table indicate number of days missing; for example, b represents 2 days.

THE WEATHER BY MONTHS.

JANUARY: The third mildest January on record; practically no snow; northeast gales during the 26-28th caused flooding in the Delaware Bay section with 1000 people homeless. FEBRUARY: Mild weather continued with about normal precipitation, one-third of which was in the form of snow; a general snowfall of about eight inches occurred on the 11th. MARCH: Cloudy and wet with temperature averaging below normal; general rains of from two to three inches during the 18th-21st; not much snow. APRIL: Wet weather continued and seeding operations were much delayed; temperature about normal, but killing frosts occurred as late as the 28th damaging peaches especially. MAY: Warm and with about the same degree of wetness as the preceding month; severe thunderstorm on the 24th in the vicinity of Camden and Moorestown did about one million dollars of damage. JUNE: Generally warm and dry with 100-degree temperatures and higher registered during the period from the 3d to 12th. JULY: Temperature about normal and precipitatio less than usual; lightning destroyed about 300,000 barrels of oi near Elizabeth on the 1st. AUGUST: The wettest August on record and the second wettest of any month, the State average being 10.53 inches; precipitation mostly due to a tropical storn which caused a total loss by wind and water of about three million dollars. SEPTEMBER: Wet weather continued with temperature averaging above normal; floods in the Passaic Rive were the greatest in thirty years. OCTOBER: Comparatively dr weather prevailed with temperature averaging about normal NOVEMBER: The coldest November since 1917; dry, with onl about one-third of the normal precipitation. DECEMBER: Rathe wide variations in temperature occurred and below-zero readings were registered at practically all stations. In many case the minimum temperatures were the lowest in fifteen years.

NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

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CLIMATOLOGICAL DATA.

NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. JANUARY, 1934. No. 1.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The temperature averaged well above the normal for the month. Minor cold periods occurred during the 2-3d and the 17-18th followed by decidedly cold weather the last three days. All other days were above normal. The highest temperatures registered were mostly in the fifties and low sixties and were recorded on the 28th. These were followed immediately afterward by the lowest which were variously observed on the 29th, 30th and 31st, and were a few degrees above the zero mark. Only one station reported a sub-zero temperature.

The periods of precipitation were confined mostly to the first and third decades, but there was a general rain during the 13th and 14th. The heaviest general rain came during the 5-6th, most stations experiencing a total of over an inch. For the State the average was 73% of the normal amount; over the Red Sandstone Plain it was 98%, Highlands 86%, Southern Interior, 70%, and the Sea Coast section 66%. Very little snow occurred, the only appreciable amounts, as a rule, falling over the Highlands and Kittatinny Valley.

No damage by high winds was reported.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 35 stations, was 33.6°, which was 2.7° above normal. The highest temperature was 64° at Belleplain on the 28th, and the lowest, —1°, at Charlotteburg on the 31st. The greatest daily range of temperature was 53° at Newton on the 29th. The highest monthly mean temperature was 39.8° at Tuckerton, and the lowest, 29.4° at Layton.

The temperature departure from the normal for the year 1934, by sections, is: The Highlands, +3.9°; Red Sandstone Plain, +3.5°; Southern Interior, +3.8°; Sea Coast, +3.7°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 2.59 inches, which was 0.98 inch below normal. The average total snowfall at 20 selected stations was 0.2 inch. The greatest monthly precipitation was 4.07 inches, at Woodcliff Lake, and the least, 0.92 inch at Belleplain. The greatest amount of precipitation in any 24 consecutive hours was 1.64 inches at Runyon on the 5-6th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1934, by sections, is: The Highlands, —0.47 inch; Red Sandstone Plain, —0.06 inch; Southern Interior, —1.03 inches; Sea Coast, —1.27 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 50 miles per hour from the northwest on the 29th at Atlantic City.

MISCELLANEOUS.

The per cent of possible sunshine was 46, or 4 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.12 inches, or 0.01 inch above normal. The highest reading was 30.62 inches at Trenton on the 3d, and the lowest 29.10 inches at Long Branch and Sandy Hook on the 28th.

The mean stage of the Delaware River at Phillipsburg was 4.2 feet, and the highest 8.0 feet on the 9th. At Trenton the mean stage was 3.7 feet, and the highest 11.4 feet on the 4th.

Dense fog occurred on the following dates: 1, 5, 6, 7, 8, 14, 23 and 27. Sleet in light amounts was noted on the 5th, 6th and 13th in the northern part of the State, and on the 27th in portions of the southern half. A thunderstorm was reported from Plainfield and Jersey City on 7th.

COMPARATIVE DATA FOR JANUARY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	30.8	−0.1	67	0	4.08	+0.51	5.41	3.33	.....	....	....	....	....
1886	27.3	−3.6	60	−10	4.47	+0.90	5.59	3.08	.....	....	....	....	....
1887	28.4	−2.5	67	−6	3.86	+0.29	6.65	2.00	.....	10	....	....	....
1888	25.4	−5.5	59	−12	4.77	+1.20	6.74	2.80	.....	9	....	....	....
1889	36.2	+5.3	60	8	5.68	+2.11	8.78	3.84	.....	9	....	....	....
1890	41.3	+10.4	78	12	2.29	−1.28	3.22	1.05	.....	10	....	....	....
1891	34.2	+3.3	59	10	6.57	+3.00	10.55	4.41	.....	10	10	11	10
1892	29.9	−1.0	67	−6	5.13	+1.56	7.05	2.50	.....	10	10	9	12
1893	21.6	−9.3	54	−21	3.04	−0.53	4.56	1.87	.....	9	10	10	11
1894	34.2	+3.3	61	−4	2.34	−1.23	3.80	1.18	.....	11	10	8	13
1895	28.1	−2.8	64	−4	4.66	+1.09	5.80	2.48	9.7	11	10	10	11
1896	28.6	−2.3	61	−7	1.66	−1.91	2.81	0.68	.....	5	12	10	9
1897	29.0	−1.9	64	−6	2.80	−0.77	4.21	1.70	11.5	9	11	8	12
1898	32.6	+1.7	64	−10	4.20	+0.63	5.90	2.79	9.7	11	9	11	11
1899	30.1	−0.8	60	−21	4.01	+0.44	5.73	2.40	6.0	11	13	8	10
1900	32.4	+1.5	64	−5	3.85	+0.28	5.50	2.37	2.6	10	11	11	9
1901	30.4	−0.5	63	−6	2.52	−1.05	4.00	1.35	5.4	9	11	11	9
1902	28.4	−2.5	58	−5	3.28	−0.29	4.35	2.52	8.6	10	12	9	10
1903	30.4	−0.5	57	−5	3.90	+0.33	5.04	2.31	6.4	10	10	10	11
1904	23.3	−7.6	58	−34	3.09	−0.48	4.67	1.34	15.6	10	13	7	11
1905	27.0	−3.9	60	−16	4.18	+0.61	7.13	2.68	21.3	9	12	9	10
1906	36.5	+5.6	74	−5	2.85	−0.72	3.86	2.08	3.1	11	11	9	11
1907	31.8	+0.9	71	−19	3.50	−0.07	5.80	1.93	10.3	14	8	9	14
1908	31.8	+0.9	60	−6	3.74	+0.17	5.22	2.29	9.9	9	12	11	8
1909	33.2	+2.3	69	−12	3.18	−0.39	4.13	2.18	7.5	12	8	9	14
1910	29.7	−1.2	54	−15	5.04	+1.47	6.65	3.66	13.3	15	8	8	15
1911	33.5	+2.6	63	0	3.44	−0.13	5.34	1.97	3.6	14	10	7	14
1912	22.3	−8.6	58	−32	2.82	−0.75	4.62	1.73	13.4	13	8	12	11
1913	39.5	+8.6	68	10	3.58	+0.01	4.71	2.63	0.8	14	11	7	13
1914	31.9	+1.0	73	−12	3.85	+0.28	6.15	1.95	2.4	9	9	8	14
1915	33.5	+2.6	61	3	6.55	+2.98	8.92	4.40	3.4	12	11	6	14
1916	35.1	+4.2	74	−2	1.50	−2.07	2.96	0.92	1.9	11	11	8	12
1917	31.4	+0.5	58	0	3.26	−0.31	4.52	2.35	5.4	13	10	8	13
1918	20.3	−10.6	56	−16	4.14	+0.57	6.14	2.78	18.9	11	12	8	11
1919	34.1	+3.2	62	−7	3.51	−0.06	4.44	2.24	1.3	8	14	7	10
1920	23.6	−7.3	53	−10	2.60	−0.97	3.53	1.61	6.6	11	11	7	13
1921	33.0	+2.1	63	−5	2.63	−0.94	3.49	1.78	2.7	9	13	8	10
1922	27.6	−3.3	57	−11	2.62	−0.95	4.13	1.08	11.1	8	15	6	10
1923	30.1	−0.8	66	−14	5.22	+1.65	7.26	3.41	16.6	12	9	7	15
1924	32.2	+1.3	65	−6	4.48	+0.91	5.69	2.88	1.4	8	15	8	8
1925	27.4	−3.5	59	−20	4.43	+0.86	8.73	2.54	22.8	10	12	6	13
1926	30.8	−0.1	63	−9	2.61	−0.96	4.04	1.63	2.4	9	11	8	12
1927	29.2	−1.7	70	−12	2.22	−1.35	3.32	1.19	7.9	11	11	7	13
1928	32.5	+1.6	65	−15	2.26	−1.31	3.97	1.37	8.3	8	15	8	8
1929	30.7	−0.2	67	−4	3.49	−0.08	5.03	1.92	1.6	10	13	7	11
1930	31.7	+0.8	72	−14	2.92	−0.65	4.03	1.80	5.9	10	10	6	15
1931	31.6	+0.7	64	−5	2.16	−1.41	4.35	1.37	1.6	5	16	7	8
1932	42.4	+11.5	76	18	4.50	+0.93	6.09	2.79	1.5	13	8	6	17
1933	38.5	+7.6	67	2	2.39	−1.18	4.45	1.38	1.2	8	13	7	11
1934	33.6	+2.7	64	−1	2.59	−0.98	4.07	0.92	0.2	8	11	8	12
Period	30.9	....	78	−34	3.57	....	10.55	0.68	7.5	10	11	8	12

W. B. O. Philadelphia 3-5-34 875.

Climatological Data for January, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	31.4	+4.0	53	28	5	29†	27	3.21	−0.55	0.84	T.	10	14	3	14	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	30.6	+3.7	56	28	−1	31	41	3.00	−0.62	1.51	0.5	10	15	5	11	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	......	......	......	......	......	......	....	2.90	−0.14	1.03	2.5	7	10	12	9	w.	Brice E. Riker.
Dover	Morris	600	50	30.5	+3.8	54	28	3	29†	28	3.36	−0.64	0.95	0	8	3	19	9	......	William C. Harris
Layton	Sussex	480	33	29.4	+4.4	52	25†	0	29	40	2.52	−0.46	0.96	T.	7	6	4	21	nw.	A. M. Depue.
Long Valley	Morris	520	4	30.2	......	51	25	3	30†	34	2.67	......	1.32	0	3	10	3	18	w.	S. N .Diits.
Newton	Sussex	769	51	31.0	+5.1	53	28†	0	29†	53	2.85	−0.53	1.08	1.7	8	8	7	16	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	31.8	+3.4	56	28	7	30	25	3.12	−0.26	0.93	T.	9	9	7	15	......	Town Engineer.
Sussex	Sussex	442	39	29.8	+3.0	50	25†	1	29	43	2.39	−0.58	1.13	2.5	8	12	3	16	......	A. J. W. Mowatt
Means and extremes	......	......	....	30.6	+3.9	56	28	−1	31	53	2.89	−0.47	1.51	0.8	8	10	7	14	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	30.9	+3.8	63	24	3	31	45	2.80	−0.58	0.79	......	8	12	3	16	sw.	John Kline.
Canoe Brook	Essex	173	4	31.4	......	58	28	4	31	33	3.42	......	0.72	......	7	15	7	9	w.	N. J. Water Policy Comm
Chatham	Morris	185	30	......	......	......	......	......	......	....	3.66	−0.31	0.98	......	11	10	8	13	......	Paul Molitor, Sr.
Elizabeth	Union	45	55	33.7	+3.3	60	28	6	30†	43	3.60	−0.10	1.29	T.	10	17	5	9	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§48	34.2	+4.3	59	28	5	31	41	3.59	+0.12	0.93	T.	10	12	9	10	w.	Hiram E. Deats.
Jersey City	Hudson	10	36	34.4	+2.3	58	28	5	29†	39	3.36	−0.34	1.40	0.1	8	8	10	13	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	47	33.1	+2.9	58	28	4	30†	40	3.08	−0.38	1.29	T.	10	15	6	11	ne.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	33.0	+4.5	58	28	5	29†	47	3.50	−0.17	0.94	0	10	17	3	11	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	81	33.6	+3.3	61	28	6	30†	43	3.23	−0.17	1.20	T.	10	11	9	11	w.	N. J. Experiment Station.
New Milford‡‡	Bergen	40	16	......	......	......	......	......	......	....	3.86	+0.78	1.07	......	9	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	33.8	+3.9	57	28	5	29	42	3.57	+0.02	0.99	T.	8	10	12	9	w.	William H. Meyer.
Plainfield	Union	120	46	32.2	+2.4	60	28	4	30	38	3.07	−0.58	1.00	0.1	7	7	15	9	nw.	S. K .Pearson.
Ridgefield	Bergen	80	17	32.8	+4.3	57	28	5	29†	28	3.61	−0.05	1.03	0.1	7	6	15	10	nw.	George P. Kirsten.
Somerville	Somerset	70	51	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	......	......	......	......	......	......	....	4.07	+0.92	0.97	......	9	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	365	64	34.4	+3.5	57	28	5	30	26	3.35	−0.31	1.34	0.2	9	8	7	16	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	33.0	+3.5	63	24	3	21	47	3.46	−0.06	1.40	T.	9	12	8	11	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	37.2^{a}	+4.2	64	28	6	30	35	0.92	−2.62	0.38	......	5	8	2	21	ne.	A. F. Waldron.
Bridgeton	Cumberland	30	51	35.2	+1.5	63	25	5	30	49	2.35	−1.10	0.78	0	10	15	4	12	ne.	Bennett K. Matlack
Burlington	Burlington	12	§48	35.5	+2.5	58	28	1	30	45	3.40	−0.17	0.85	T	8	10	11	10	ne.	Public Service Power Co.
Camden	Camden	20	2	35.1	......	60	28	7	30	28	2.86	......	1.44	0.1	9	8	9	14	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	34.4	......	61	28	5	31	43	2.96	−1.00	1.20	0	10	13	9	9	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§28	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Mrs. Annie C. Measley.
Hightstown	Mercer	146	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	H. M. Barrett.
Indian Mills‡‡	Burlington	76	45	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	James M. Armstrong.
Lakewood	Ocean	54	30	35.4	+3.9	60	25	4	31	45	2.99	−1.01	1.25	T.	8	9	8	14	nw.	R. W. Holman.
Moorestown	Burlington	62	71	34.5	+3.6	61	28	7	31	30	2.62	−0.72	1.18	0	8	10	9	10	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	27	......	......	......	......	......	......	....	1.36	−1.78	0.40	T.	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	35.6	......	61	28	5	31	44	2.57	......	0.81	0	9	9	8	14	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	36.6	......	63	25	2	30†	35	1.83	−0.37	0.50	......	13	13	6	12	w.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	......	......	......	......	......	......	....	1.48	......	0.48	0	7	13	3	15	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	32.8	......	60	28	2	31	38	3.44	−0.02	1.64	......	7	14	11	6	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	34.2	+3.7	59	28	7	30	30	3.37	+0.06	1.45	0.2	10	6	10	15	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	......	......	......	......	......	......	....	3.33	......	1.39	T.	9	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	41	39.8	+6.9	58	27	6	30	34	1.10	−2.57	0.32	T.	9	11	13	7	nw.	John H. Brown.
Philadelphia, Pa.	......	114	63	37.8	+5.2	59	25	10	30	24	2.91	−0.39	1.34	T.	9	8	8	15	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	35.5	+3.8	64	28	1	30	49	2.44	−1.03	1.64	T.	9	11	8	12	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	36.2	+3.7	61	28	8	30†	42	2.87	−0.61	1.61	T.	6	20	6	5	w.	Information Bureau.
Atlantic City	Atlantic	16	61	38.3	+5.8	56	25	8	30	30	1.46	−2.03	0.40	T.	10	7	10	14	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	33.9	+2.4	63	28	5	30	27	2.81	−1.33	1.33	T.	8	6	8	17	nw.	William D. Martin.
Sandy Hook	Monmouth	22	36	34.2	+2.9	56	28	7	29	25	2.84	−1.12	1.49	T.	8	7	8	16	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	35.6	+3.7	61	28	5	30	42	2.49	−1.27	1.61	T.	8	10	8	13	w.	
For the State	......	......	....	33.6	+2.7	64	28	−1	31	53	2.59	−0.98	1.64	0.2	8	11	8	12	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for January, 1934

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.11				.80	.01	.84	.20					.35	.05								.07	.58					.20				3.21
Charlotteburg	Passaic	.04				.65	.86	.10	.20					.08	.16									.75					.03	.13			3.00
Culvers Lake	Delaware				T.	.66		1.03	.05					.31	.08	T.				T.			T.	.67				T.	.10		T.		2.90
Dover	Passaic					.92	.02	.91	.04					.38									*	.91					.18				3.36
Layton	Delaware	T.		T.		.43	T.	.96	.14					.15	.28									.54					.02				2.52
Long Valley	Morris					.20		1.32						.54										.61									2.67
Newton	Delaware	.04			T	.60		1.08	.18					.40	.05	T.							T.	.33				T.	.17		T.		2.85
Phillipsburg	do	.05			T	.93	.07	.92	.12					.37		T.		T.					.02	.42		T.		T.	.22	T.			3.12
Sussex	Hudson	.03					.26	1.13	.17					.18		T.							T.	.24				.25	.13				2.39
The Red Sandstone Plain.																																	
Boonton ‖	Passaic					.15	.60	.32	.55						.29									.79	.05				T.	.05			2.80
Canoe Brook ‖	Essex					.55	.52	.52	.55					T.	.38									.72	T.			T.	T.	.18			3.42
Chatham ‖	do		.03			.12	.98	.46	.74					.02	.27									.66	.13				.03	.22			3.66
Elizabeth	Coast	.01			T.	1.01	.28	.56	.22					.28	.19								T.	.80	T			T.	.10	.15			3.60
Flemington	Raritan	.21				.93	.22	.83	.32					.37	T.									.51				.01	.06	.13			3.59
Jersey City	Coast	T.			T.	1.40	.01	.52	.19					.40									T.	.65				T.	.18	.01			3.36
Lambertville	Delaware	.03				1.29	.20	.43	.05					.52	.07									.38				T	.07	.04			3.08
Little Falls ‖	Passaic					.46	.43	.39	.68					.01	.47									.91	.03				.01	.11			3.50
New Brunswick	Raritan	.03			T.	1.20	.26	.48	.22					.22	.15	T.								.58				T.	.02	.07			3.23
New Milford ‖	Hackensack					.28	.65	.30	.84						.46									1.07	.07				.05	.14			3.86
Paterson	Passaic					.73	.14	.72	.31					.58	.01									.99				T.	.09				3.57
Plainfield	Raritan	T.			T	1.00		.70	.20					.40										.61				T.	.06	.10			3.07
Ridgefield**	Hackensack					.42	.55	1.03						T	.57			T.						.87				.01	.16	T.			3.61
Somerville	Raritan																																
Woodcliff Lake ‖	Hackensack					.31	.91	.32	.79						.51									.97	.12				.05	.09			4.07
New York, N. Y***	Coast	T.			T.	1.34	.04	.67	.05					.38									.04	.63				T	.18	.02			3.35
The Southern Interior.																																	
Belleplain	Tuckahoe	T.			.02			.30						.17										.38				.05					0.92
Bridgeton	Delaware				.53	.78	.15	.06					.10	.12									.31			.09	.04		.17				2.35
Burlington	Delaware	.12			T	.80	.25	.85	.15					.42		T.							T.	.66					.15	T.			3.40
Camden***	do	.04			.03	1.42	.01	.69						.25		T.							.18	.21		T.		T.	.03	T.			2.86
Freehold	Raritan	.03			.03	1.20	.34	.43	.06					.30	.02	T.								.50					.05				2.96
Hammonton	Mullica																																
Hightstown	Raritan																																
Indian Mills	Mullica																																
Lakewood	Metedeconk	T.		T.	T.	1.25	.45	.28	.08					.23		T.								.60				T.	.02	.08			2.99
Moorestown ‖	Delaware					.21	1.18	.32	.24					T.	.30									.31	.05				.01	T.			2.62
Northfield	Coast	.02				.40	.05	.35						.16	T.									.33				.02		.03			1.36
Pemberton	Delaware	.07	T.	T.	.01	.81	.49	.30	.03					.34		T.								.42		T	T.		T.	.10			2.57
Pleasantville ‖	Coast	.05	T.			.22	.40	.11	.17					.11	.06			T.						.50	.04		.05	.02	.07	.03	T.		1.83
Port Norris	Maurice	.05				.48	.12	.23						.12										.43				.05					1.48
Runyon	Coast					1.27	.37	.49	.38					.39									.44						.10				3.44
Trenton***	Delaware	.03			T.	1.45	.02	.86	.10	T.				.34	T.	T.		T.					.05	.41				T.	.07	.04			3.37
Trenton No. 2‖	do	T.	.02			.19	1.39	.22	.59					T.	.32		T.	T.						.44	.07				T.	.09	T.		3.33
Tuckerton	Coast	.04	.01			.32	.21	.20	.11																		.09	.02	.10				1.10
Phila., Pa***	Delaware	.04			.03	1.31	T.	.61	.10					.30		T.		T.					.10	.36		T.		T.	.06	T.			2.91
The Sea Coast.																																	
Asbury Park	Coast	T.		T.	T.	1.40	.21	.34	T.					.27		T.								.57				T.	.08	T.			2.87
Atlantic City***	do	.08		T.	.02	.36		.29		T.				.19		T		T.					.02	.38		T.	.01	.05	.06	T.			1.46
Long Branch**	do	T.		T.	T.	1.33	.01	.57	.01					.26		T.							.02	.55				T.	.06	T.			2.81
Sandy Hook***	do	T.			T.	1.49	.03	.52	.04					.24		T.							.04	.41				T.	.07	T.			2.84

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.15	30.56	3	29.16	28	16.0	50	nw.	29	77	67	69	46
Camden						9.4	35	w.	29				
Long Branch	30.10	30.60	4	29.10	28					74	63	61	49
New York, N. Y	30.11	30.61	4	29.12	28	13.9	56	nw.	29	72	61	62	51
Philadelphia, Pa	30.15	30.59	3	29.17	28	12.7	34	w.	29	69	58	60	48
Ridgefield	30.11	30.61	4	29.11	28								
Sandy Hook	30.11	30.61	3	29.10	28	15.0	44	nw.	29	82	78	78	38
Trenton	30.13	30.62	3	29.12	28	9.7	24	nw.	17	77	65	68	49

Daily Temperatures for January, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	42	44	31	27	36	37	39	47	43	40	44	40	37	38	37	45	40	30	45	44	38	37	46	41	48	47	39	53	45	15	28	39.5
	Minimum	33	21	9	18	27	33	32	35	28	28	30	23	31	29	27	27	23	13	24	17	18	19	35	27	27	24	21	29	5	5	5	23.3
Charlotteburg	Maximum	49	49	30	33	34	51	55	44	43	40	40	38	36	42	43	44	42	24	27	42	54	32	48	43	55	52	49	56	47	16	23	41.3
	Minimum	34	16	7	17	24	31	35	35	29	25	27	21	17	31	26	21	19	8	10	10	12	22	30	24	26	24	20	14	9	0	—1	19.8
Dover	Maximum	48	38	29	28	35	50	40	45	43	42	42	36	37	38	36	45	35	28	42	42	35	36	47	39	53	46	39	54	10	15	25	38.0
	Minimum	37	14	10	25	27	33	37	36	28	28	28	20	31	32	23	27	18	12	22	14	19	24	29	26	30	23	18	32	3	3	5	23.0
Layton	Maximum	48	46	26	25	32	51	40	45	43	40	41	35	35	38	35	43	35	27	41	44	32	30	48	39	52	47	40	52	40	14	25	38.4
	Minimum	34	15	7	20	25	31	34	33	29	27	29	22	29	28	22	24	16	8	16	11	17	19	30	24	18	20	13	31	0	1	1	20.5
Long Valley	Maximum	46	48	29	38	36	45	40	45	40	40	40	37	38	36	36	43	39	37	42	42	38	35	46	38	51	47	48	50	20	12	26	39.0
	Minimum	32	17	9	24	22	32	32	32	25	30	28	19	30	30	23	21	20	13	21	13	17	19	29	26	28	13	27	20	4	3	3	21.4
Newton	Maximum	47	47	27	26	34	46	45	44	45	40	42	37	35	45	38	38	29	43	43	43	38	35	50	39	52	49	38	53	53	13	24	39.9
	Minimum	34	14	5	19	24	30	34	33	32	30	26	26	28	30	21	19	10	22	29	29	15	17	30	24	27	22	24	33	0	0	2	22.2
Phillipsburg	Maximum	42	42	27	31	37	38	39	47	41	42	44	36	39	40	39	45	36	29	44	44	36	40	46	40	48	41	37	56	32	17	28	38.8
	Minimum	33	21	12	27	31	34	36	34	30	29	29	23	33	31	28	28	24	11	27	19	21	23	32	28	24	26	23	31	8	7	8	24.9
Sussex	Maximum	42	44	25	24	34	46	40	42	43	39	39	36	35	37	36	44	41	26	41	42	32	31	46	39	50	50	35	50	44	14	25	38.0
	Minimum	35	17	7	20	23	32	34	34	30	29	30	20	30	30	22	20	20	11	19	15	16	19	30	25	25	24	18	31	1	2	4	21.7
The Red Sandstone Plain.																																	
Boonton§§	Maximum	61	43	28	33	38	52	39	47	45	44	43	37	38	39	35	52	32	31	43	42	35	43	63	43	52	39	39	50	36	15	27	40.8
	Minimum	23	30	9	11	27	32	32	34	29	31	30	20	21	33	25	25	22	13	13	15	15	19	18	28	26	24	18	24	5	5	3	21.0
Canoe Brook§§	Maximum	47	36	34	33	36	50	49	54	47	39	45	37	38	41	42	47	30	36	44	44	36	49	49	46	54	42	47	58	38	32	31	42.3
	Minimum	27	20	7	18	24	30	33	35	22	23	26	16	27	30	24	21	22	13	20	11	17	19	28	27	22	20	16	28	5	5	4	20.6
Elizabeth	Maximum	46	46	30	32	38	42	41	49	43	45	44	41	40	43	38	49	42	29	46	45	36	39	50	45	51	52	43	60	50	18	29	42.0
	Minimum	33	22	15	28	31	34	35	38	29	27	27	24	32	31	26	26	24	15	24	18	23	29	38	30	27	28	23	30	7	6	6	25.4
Flemington	Maximum	47	45	29	32	36	53	42	51	47	46	48	42	38	43	42	49	43	35	49	47	39	38	50	46	56	52	39	59	49	25	30	43.5
	Minimum	31	23	12	28	30	34	36	37	27	31	28	22	31	31	27	29	24	15	25	17	21	24	36	28	24	25	31	29	8	6	5	25.0
Jersey City	Maximum	48	40	33	37	42	47	45	49	45	44	45	40	41	41	38	46	34	31	43	44	37	40	50	41	52	42	44	58	44	17	31	41.6
	Minimum	39	19	14	31	31	34	40	37	36	31	29	29	33	32	23	31	24	15	28	25	23	31	33	28	33	29	29	38	5	5	7	27.2
Lambertville	Maximum	46	49	28	32	37	45	39	48	41	43	44	37	39	39	39	46	39	30	45	45	38	39	48	47	55	51	42	58	47	16	30	41.4
	Minimum	36	17	12	27	30	33	37	37	30	28	27	22	31	32	27	31	23	13	23	22	22	27	30	27	28	27	23	32	7	4	4	24.8
Little Falls§§	Maximum	50	48	29	33	36	54	46	49	47	45	46	39	41	40	39	48	36	33	46	44	35	48	51	46	57	42	52	58	52	17	31	43.2
	Minimum	29	20	10	15	28	32	34	35	28	27	30	21	26	33	25	27	23	14	17	16	19	25	28	28	31	27	20	25	5	5	7	22.9
New Brunswick	Maximum	49	47	28	32	37	43	43	49	43	43	44	40	39	40	38	48	42	29	45	45	40	40	50	43	55	53	43	61	50	16	28	42.0
	Minimum	34	23	13	27	30	34	38	38	28	30	27	22	32	31	27	29	24	15	24	20	21	25	37	29	27	28	21	30	7	6	6	25.3
Paterson	Maximum	48	48	29	30	36	51	44	47	44	44	43	37	38	39	38	47	41	29	43	43	38	38	50	42	56	51	41	57	47	16	27	41.4
	Minimum	36	20	13	27	29	34	38	38	33	33	31	25	32	34	25	30	23	14	25	21	21	28	36	28	32	28	22	35	5	6	7	26.1
Plainfield	Maximum	48	40	32	36	40	43	40	50	43	44	44	40	40	40	37	46	30	30	43	44	37	38	50	41	50	41	44	60	44	17	28	40.6
	Minimum	31	19	14	26	30	35	35	36	25	27	26	20	28	30	23	25	23	14	24	15	21	23	33	28	30	28	21	29	6	4	5	23.7
Ridgefield	Maximum	49	25	34	36	41	48	44	47	43	44	44	41	41	41	37	46	35	30	44	44	37	48	50	40	53	42	45	57	29	17	31	40.7
	Minimum	37	14	13	27	30	31	35	38	34	31	27	25	32	30	20	30	20	13	26	25	21	30	30	26	32	25	25	29	5	5	7	24.9
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	49	40	34	37	43	48	47	48	46	45	45	40	42	41	38	46	35	31	44	44	37	41	50	42	53	42	44	57	31	17	31	41.5
	Minimum	40	18	14	32	32	33	40	38	36	32	29	30	35	33	23	32	18	15	29	29	23	32	31	28	34	29	29	31	5	5	8	27.2
The Southern Interior.																																	
Belleplain	Maximum	53	....	51	...	52	55	55	55	46	47	52	43	....	47	45	51	41	37	57	50	45	45	53	44	63	51	53	64	55	17	....	48.9[d]
	Minimum	44	....	25	....	25	37	38	47	35	24	20	18	....	36	26	26	17	15	17	15	16	16	40	28	24	26	20	34	11	6	....	25.4[d]
Bridgeton	Maximum	55	32	35	43	45	44	49	54	45	44	44	41	44	44	43	51	31	38	48	49	48	50	52	43	63	44	56	60	14	16	35	43.9
	Minimum	27	21	25	33	35	38	42	36	26	27	24	26	33	32	30	28	19	22	21	22	27	41	28	27	34	26	33	11	6	5	16	26.5
Burlington	Maximum	51	52	31	36	38	52	51	51	44	43	44	37	42	45	42	49	47	32	47	49	47	43	51	46	57	54	54	58	55	13	30	44.9
	Minimum	10	27	17	27	32	35	38	35	32	33	26	24	29	31	30	32	26	18	26	28	24	29	40	30	22	30	28	32	10	1	7	26.1
Camden	Maximum	52	36	30	36	39	44	41	52	42	45	45	37	40	44	43	51	34	31	48	48	41	43	52	41	58	46	50	60	36	18	31	42.4
	Minimum	37	21	20	30	34	38	40	39	34	33	29	23	34	32	31	32	25	21	27	24	24	30	34	30	30	28	24	32	10	7	9	27.8
Freehold	Maximum	54	48	28	34	39	44	42	49	44	44	43	37	40	41	38	49	40	29	45	45	37	42	51	43	56	52	46	61	52	16	30	42.5
	Minimum	37	23	14	28	33	36	39	38	30	29	27	22	32	32	27	30	23	16	23	22	22	28	39	29	29	28	25	32	9	6	5	26.2
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	...	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Lakewood	Maximum	56	54	30	39	46	46	42	50	45	44	42	39	41	42	39	49	45	29	46	46	37	41	51	44	60	56	49	62	56	17	32	44.4
	Minimum	34	24	20	29	37	40	39	42	29	26	26	22	26	32	29	33	25	18	21	17	23	29	41	30	27	28	22	30	11	6	4	26.5
Moorestown	Maximum	54	37	30	36	39	47	42	50	42	43	46	37	41	43	41	51	33	34	46	48	39	42	51	41	58	43	50	61	34	19	31	42.2
	Minimum	37	19	18	29	33	37	39	36	34	30	26	25	33	31	30	30	24	19	27	23	25	29	32	39	28	26	24	34	10	8	7	26.8
Pemberton	Maximum	54	52	29	36	41	45	43	50	45	44	44	39	42	41	40	49	44	30	47	47	42	43	52	43	53	54	50	61	55	14	31	43.9
	Minimum	35	27	20	29	35	38	38	40	32	27	27	23	33	32	30	32	29	17	26	18	22	28	41	30	27	29	23	32	11	7	5	27.2
Pleasantville§§	Maximum	57	55	37	43	54	52	53	57	46	45	45	42	45	46	42	57	36	39	51	48	41	50	53	48	63	46	52	57	46	19	36	47.1
	Minimum	35	29	26	27	37	40	36	43	35	28	22	20	23	33	32	30	24	14	17	14	18	23	39	28	28	35	20	39	13	2	2	26.2
Runyon	Maximum	50	48	28	32	37	44	44	48	52	39	40	48	40	42	39	50	42	26	47	45	46	50	52	42	52	49	52	60	40	16	28	42.8
	Minimum	35	22	8	28	30	34	36	38	36	22	17	16	36	33	28	25	24	10	15	7	17	34	26	30	21	13	17	30	8	5	2	22.7
Trenton	Maximum	50	38	31	34	39	47	41	49	41	43	45	38	40	42	40	49	34	31	46	46	37	41	50	40	56	43	46	59	38	16	29	41.3
	Minimum	37	20	16	29	31	36	39	39	34	32	28	27	33	30	28	33	24	17	27	26	24	28	33	29	30	30	26	34	8	7	9	27.2
Tuckerton	Maximum	54	40	45	46	50	50	50	56	52	50	55	55	50	46	48	50	45	38	42	45	46	56	55	50	48	56	58	57	46	20	35	48.2
	Minimum	30	26	30	28	36	35	36	36	36	38	38	37	35	32	36	40	34	20	25	32	34	36	38	32	34	38	40	39	12	6	8	31.5
Philadelphia, Pa.	Maximum	54	39	33	38	45	52	45	51	44	45	47	39	43	45	45	51	37	33	48	47	42	44	52	43	59	47	49	59	35	19	31	43.9
	Minimum	39	21	23	32	36	40	41	42	41	36	33	34	37	34	34	37	27	22	30	32	30	33	36	32	35	36	35	35	12	10	12	31.6
The Sea Coast.																																	
Asbury Park	Maximum	57	53	31	39	41	46	46	51	45	44	43	38	40	42	38	49	40	28	45	42	36	41	51	40	59	53	47	61	51	17	28	43.3
	Minimum	38	26	22	31	36	37	39	39	33	31	27	30	31	34	30	35	24	17	26	25	31	35	39	31	32	30	31	38	9	8	8	29.1
Atlantic City	Maximum	54	46	33	40	50	53	47	56	42	46	46	40	44	45	43	49	37	35	51	45	40	44	53	43	56	53	49	52	40	18	36	44.7
	Minimum	46	27	26	43	39	40	41	42	38	33	32	30	38	37	33	37	24	19	33	31	29	38	35	30	37	36	37	40	10	8	11	31.9
Long Branch	Maximum	56	43	31	35	39	44	40	50	43	45	41	39	39	40	37	49	33	31	45	46	38	41	50	40	58	40	46	63	35	15	28	41.3
	Minimum	37	25	23	31	33	34	35	34	29	27	25	23	34	31	26	29	22	17	28	20	25	33	32	30	30	27	25	36	8	5	6	26.5
Sandy Hook	Maximum	49	40	32	34	38	43	42	46	40	42	40	37	39	40	37	47	36	29	42	43	35	41	48	39	51	40	43	56	31	17	31	39.6
	Minimum	36	24	22	31	33	35	34	34	33	33	31	30	35	36	28	35	21	18	29	30	28	32	33	32	33	32	32	31	7	8	12	28.8

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

1.05
NJ

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. FEBRUARY, 1934. No. 2.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Record breaking cold weather prevailed during the month, the State average of 18.6 degrees being the lowest ever recorded. The nearest approach heretofore was in January, 1918, with an average for the State of 20.4 degrees. The record begins with 1885. There were but two to three days during the entire month when the daily average was above the normal. On the 9th, which was the coldest day, the average was from 33 to 34 degrees below normal, the lowest points reached by the mercury ranging between 9 and 26 degrees below zero. This latter record, made at Canoe Brook in Essex County, is the lowest on record for February. Highest temperatures for the month were mostly in the forties and low fifties and were registered generally on the 15th and 22d. Most of the cold weather was due to high pressure areas decending from about the Hudson Bay district.

The precipitation was below normal except over the Southern Interior and Sea Coast sections where the totals practically equalled the February normals. For the State as a whole, however, the amount was about 80% of the normal. Dates of general occurrence were the 1st, 2d, 13th, and from the 19th to 26th, inclusive, except the 21st and 24th. The amount of snowfall was approximately the same in all sections, but the Southern Interior and Sea Coast divisions received additional heavier amounts of rain that brought the monthly totals up to the normal. The snow came mostly in two storms, one on the 20th and the other around the 26th, each storm bringing falls of between six and twelve inches over most of the State.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 36 stations, was 18.6°, which was 12.1° below normal. The highest temperature was 54° at Boonton on the 22d, and the lowest, —26°, at Canoe Brook on the 9th. The greatest daily range of temperature was 53° at Layton on the 28th. The highest monthly mean temperature was 24.5° at Tuckerton, and the lowest, 14.6° at Layton.

The temperature departure from the normal for the year 1934, by sections, is: The Highlands, —2.9°; Red Sandstone Plain, —4.1°; Southern Interior, —4.0°; Sea Coast, —4.0°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 43 stations, was 2.77 inches, which was 0.84 inch below normal. The average total snowfall at 20 selected stations was 22.7 inches. The greatest monthly precipitation was 4.83 inches, at Atlantic City, and the least, 0.94 inch at Culvers Lake. The greatest amount of precipitation in any 24 consecutive hours was 1.95 inches at Freehold on the 25-26th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1934, by sections, is: The Highlands, —1.95 inches; Red Sandstone Plain, —1.08 inches; Southern Interior, —1.12 inches; Sea Coast, —1.29 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 13 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 43 miles per hour from the northwest at Sandy Hook on the 13th.

MISCELLANEOUS.

The per cent of possible sunshine was 61, or 5 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.16 inches, or 0.06 inch above normal. The highest reading was 30.94 inches at Trenton on the 28th, and the lowest 29.19 inches at Sandy Hook on the 13th.

The mean stage of the Delaware River at Phillipsburg was not not recorded due to the river being frozen. At Trenton the mean stage was 3.0 feet, and the highest 4.3 feet on the 3d.

Dense fog occurred along the Delaware River and in scattered sections of the coast on the 12th. Sleet fell in light amounts on the 19th, 25th and 26th, it occurring mostly in the southern portion of the State.

COMPARATIVE DATA FOR FEBRUARY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	23.9	−6.8	54	−2	3.93	+0.32	5.85	1.44	......	......	......	......	...
1886	28.9	−1.8	64	−10	5.42	+1.81	8.00	4.13	......	......	......	......	......
1887	33.9	+3.2	69	6	5.24	+1.63	6.74	4.13	......	13	......	......	......
1888	30.6	−0.1	60	−5	3.53	−0.08	6.01	2.04	......	8	......	......	......
1889	27.7	−3.0	53	−3	2.49	−1.12	3.80	1.65	......	8	......	......	...
1890	**39.9**	+9.2	76	14	4.17	+0.56	5.32	2.43	......	10	......	......	...
1891	38.0	+7.3	71	1	5.11	+1.50	7.20	3.70	......	14	6	9	13
1892	33.6	+2.9	58	7	1.63	−1.98	3.62	0.67	......	7	7	9	13
1893	30.1	−0.6	63	−1	5.73	+2.12	8.90	3.14	......	11	7	8	13
1894	29.7	−1.0	62	−11	4..42	+0.81	6.17	3.25	......	11	9	8	11
1895	23.6	−7.1	57	−12	1.28	−2.33	2.34	**0.55**	11.6	5	13	9	6
1896	32.1	+1.4	62	−12	**6.77**	+3.16	**10.06**	4.82	6.7	12	9	9	11
1897	32.5	+1.8	59	−6	3.61	0.00	6.37	2.38	8.0	8	8	10	10
1898	32.7	+2.0	65	−15	3.48	−0.13	5.45	1.55	2.0	9	12	7	9
1899	25.8	−4.9	60	−17	6.06	+2.45	8.77	3.78	**31.3**	15	10	6	12
1900	31.0	+0.3	69	−6	5.30	+1.69	7.88	3.27	9.6	10	9	9	10
1901	25.4	−5.3	52	−6	**0.94**	−2.67	1.65	0.69	4.9	4	15	9	4
1902	27.4	−3.3	62	−7	6.24	+2.63	8.44	4.29	16.5	9	12	6	10
1903	33.7	+3.0	70	−16	4.87	+1.26	6.60	3.74	6.7	10	12	8	8
1904	24.8	−5.9	65	−16	2.45	−1.16	3.09	1.36	5.6	8	13	8	8
1905	**23.4**	−7.3	53	−18	2.53	−1.08	3.96	0.70	7.3	7	14	7	7
1906	30.9	+0.2	64	−12	2.58	−0.03	3.85	1.77	5.4	7	14	7	7
1907	23.6	−7.1	55	−22	2.67	−0.94	3.90	1.82	20.8	8	14	7	7
1908	28.1	−2.6	65	−17	4.79	+1.18	7.44	2.85	11.9	9	10	10	9
1909	37.8	+7.1	72	−2	4.96	+1.35	6.78	3.55	2.3	12	6	10	12
1910	30.5	−0.2	69	−11	3.08	−0.53	4.81	1.06	6.2	10	10	9	9
1911	30.9	+0.2	67	−12	2.78	−0.83	4.06	1.76	11.2	11	8	7	13
1912	27.7	−3.0	61	−14	2.49	−1.12	3.12	1.68	2.8	5	11	12	6
1913	30.6	−0.1	70	−5	2.49	−1.12	3.21	1.48	3.5	7	16	6	6
1914	25.9	−4.8	67	−12	2.85	−0.76	4.94	1.89	15.1	9	12	7	9
1915	35.7	+5.0	75	−7	5.37	+1.76	7.28	2.97	3.5	8	11	6	11
1916	28.1	−2.6	63	−18	4.21	+0.60	6.17	2.84	11.4	11	10	6	13
1917	28.1	−2.6	62	−19	1.95	−1.66	2.80	0.92	8.3	11	10	9	9
1918	29.0	−1.7	67	−23	2.08	−0.53	3.41	1.03	2.6	7	12	8	8
1919	33.6	+2.9	65	4	3.39	−0.22	6.48	1.37	1.2	10	15	4	9
1920	27.9	−2.8	54	−17	4.20	+0.59	7.20	2.39	20.0	11	11	8	10
1921	34.0	+3.3	71	−5	3.81	+0.20	5.82	2.58	13.6	10	10	8	10
1922	33.6	+2.9	73	−10	2.94	−0.67	4.60	1 80	8.5	10	10	8	10
1923	26.1	−4.6	56	−12	2.58	−1.03	3.74	1.51	13.8	12	10	8	10
1924	28.9	−1.8	62	−3	4.10	+0.49	6.11	2.45	11.9	9	13	5	11
1925	37.3	+6.6	72	−1	2.23	−1.38	4.64	1.18	**0.7**	7	12	6	10
1926	29.4	−1.3	57	−11	4.54	+0.93	6.30	2.86	21.2	11	9	5	14
1927	36.1	+5.4	66	4	3.12	−0.49	4.55	2.18	5.1	11	10	8	10
1928	32.1	+1.4	63	−6	4.05	+0.44	5.63	2.17	4.4	10	12	7	10
1929	31.6	+0.9	63	−9	4.06	+0.45	5.92	2.76	9.2	8	13	7	8
1930	35.6	+4.9	**80**	−10	2.80	−0.81	5.13	1.07	4.2	9	13	7	8
1931	33.3	+2.6	62	−9	2.18	−1.43	3.42	0.81	3.0	8	14	5	9
1932	35.9	+5.2	69	4	2.16	−1.45	3.23	1.08	2.2	9	11	6	12
1933	33.5	+2.8	67	−12	3.33	−0.28	4.72	2.20	10.4	10	12	6	10
1934	18.6	−12.1	54	**−26**	2.77	−0.84	4.88	0.94	22.7	8	15	6	7
Period	30.7	....	80	−26	3.61	....	10.06	0.55	8.8	9	11	7	10

W. B. O. Philadelphia 3-29-34-875.

Climatological Data for February, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	18.2	−9.7	47	22	−15	9	40	1.83	−1.73	0.95	21.5	5	18	5	5	...	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	17.8	−8.6	50	17	−21	9	46	2.01	−1.68	0.70	25.0	9	19	5	4	n.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	...	...	...	...	...	...	...	0.94	−2.02	0.40	18.1	7	16	7	5	nw.	Brice E. Riker.
Dover	Morris	600	50	15.6^{b}	−11.3	47	15	−19	9	44	2.27	−1.50	0.95	21.7	7	11	12	5	...	William C. Harris
Layton	Sussex	480	33	14.6	−10.5	48	22	−23	28	53	1.26	−1.73	0.58	16.7	8	12	5	11	ne.	A. M. Depue.
Long Valley	Morris	520	4	15.3	...	45	15	−18	9	43	2.30	...	0.60	23.0	6	13	7	8	nw.	S. N .Dilts.
Newton	Sussex	769	51	17.6	−9.4	53	15	−20	9	46	1.70	−1.45	0.69	22.6	8	15	6	7	ne.	Irving J. Kern.
Phillipsburg	Warren	363	§51	18.5	−10.3	47	15	−9	28	33	2.46	−0.85	0.90	21.9	7	17	6	5	...	Town Engineer.
Sussex	Sussex	442	39	17.6	−8.9	50	15	−17	9	43	2.08	−0.88	0.85	20.8	7	21	3	4	...	A. J. W. Mowatt
Means and extremes	...	...	...	16.9	−9.8	56	15	−23	28	53	1.87	−1.48	0.95	21.3	7	16	6	6	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	16.4	−11.3	54	22	−20	9	46	1.19	−2.11	0.40	...	7	15	1	12	nw.	John Kline.
Canoe Brook	Essex	173	4	15.7	...	47	22	−26	9	51	2.62	...	1.11	...	7	13	10	5	nw.	N. J. Water Policy Comm
Chatham	Morris	185	30	...	...	...	...	...	...	...	2.77	−1.10	0.94	...	7	16	5	7	...	Paul Molitor. Sr.
Elizabeth	Union	45	55	18.8	−12.2	42	19	−15	9	36	3.48	−0.38	1.16	28.6	10	17	6	5	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§48	19.8	−10.1	53	2	−16	9†	43	1.85	−1.47	0.59	18.5	8	19	4	5	nw	Hiram E. Deats.
Jersey City	Hudson	10	36	19.9	−11.6	44	22	−14	9	30	2.89	−1.04	0.97	29.8	8	12	7	9	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	47	18.0	−12.6	45	22	−18	9	30	2.77	−0.61	1.13	30.3	9	17	6	5	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	18.2	−11.1	53	16	−18	9	49	2.18	−1.62	0.80	22.0	8	16	4	8	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	81	17.7	−13.3	43	22	−16	9	37	2.78	−0.59	1.00	26.5	8	17	7	4	nw.	N. J. Experiment Station.
New Milford‡‡	Bergen	40	16	...	...	...	...	...	...	...	2.93	−0.26	1.36	...	6	...	...	...	...	Hackensack Water Co
Paterson	Passaic	80	64	19.7	−10.9	48	15	−16	9	38	2.46	−1.52	1.01	24.4	9	14	8	6	nw.	William H. Meyer.
Plainfield	Union	120	46	17.3	−12.0	44	22	−17	9	39	2.98	−0.77	1.02	29.7	7	15	5	8	n.	S. K .Pearson.
Ridgefield	Bergen	80	17	17.1	−11.7	44	22	−17	9	33	2.36	−1.54	0.82	29.9	7	14	7	7	n.	George P. Kirsten.
Somerville	Somerset	70	51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	...	...	...	...	...	...	...	3.02	−0.30	1.19	...	7	...	...	...	...	Hackensack Water Co.
New York, N.Y.	...	365	64	19.8	−11.5	43	22	−14	9	29	2.80	−1.02	0.98	30.1	8	11	7	10	n.	U. S. Weather Bureau.
Means and extremes	...	...	...	18.0	−11.7	54	22	−26	9	51	2.59	−1.02	1.36	26.6	8	15	6	7	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	21.3^{f}	−11.2	53^{f}	15	−13^{e}	9	45^{e}	3.94	+0.61	...	...	...	...	...	...	...	A. F. Waldron.
Bridgeton	Cumberland	30	51	19.0	−15.1	50	22	−12	8	29	3.81	+0.59	1.24	19.5	6	21	2	5	sw.	Bennett K. Matlack
Burlington	Burlington	12	§48	21.8	−10.5	48	23	−14	9	33	2.56	−0.76	1.05	24.1	6	18	1	9	ne.	Public Service Power Co.
Camden	Camden	20	2	18.9	...	44	22	−11	9	37	2.66	...	0.71	21.4	8	11	9	8	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	17.8	...	43	22	−20	9	33	4.62	+0.48	1.95	30.0	8	16	6	6	w.	Moreau Plant Co.
Hammonton	Atlantic	80	§28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Hightstown	Mercer	146	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	H. M. Barrett.
Indian Mills‡‡	Burlington	76	45	19.8	−12.7	43	15†	−25	9	45	3.22	−0.45	1.16	27.5	5	10	8	10	nw.	James M. Armstrong.
Lakewood	Ocean	54	30	19.0	−12.0	42	22	−16	9	40	3.71	−0.18	1.28	31.0	8	11	3	14	nw.	R. W. Holman.
Moorestown	Burlington	62	71	18.4	−13.4	44	22	−13	9	30	2.30	−0.95	0.70	21.2	6	14	9	5	nw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	27	...	...	...	...	...	...	...	3.94	+1.10	1.16	16.7	10	...	...	...	...	William L. Flick.
Pemberton	Burlington	55	4	18.1	...	49	22	−17	9	38	3.32	...	1.34	24.4	9	16	3	9	nw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	21.4	...	48	22	−11	9	39	3.17	+0.27	1.10	...	9	13	3	12	nw.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	...	...	...	...	...	...	...	3.97	...	1.10	16.5	8	12	5	11	n.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	15.4	...	43	19	−19	9	46	3.01	−0.48	1.18	...	7	20	4	4	nw.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	18.5	−12.2	42	22	−14	9	30	2.21	−1.06	0.77	23.1	8	11	8	9	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	...	...	...	...	...	...	...	2.92	...	1.02	27.3	6	...	...	...	...	Edward H. Ristow.
Tuckerton	Ocean	23	41	24.5	−7.9	42	14†	−12	9	36	2.62	−0.87	0.90	20.0	8	12	8	8	nw.	John H. Brown.
Philadelphia, Pa	...	114	63	22.2	−11.7	47	22	−11	9	29	2.75	−0.57	0.80	18.1	9	12	7	9	nw.	U. S. Weather Bureau.
Means and extremes	...	...	...	19.5	−11.9	53	15	−25	9	46	3.21	−0.09	1.95	23.3	7	14	5	9	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	20.3	−11.7	41	15	−12	9	30	3.54	+0.13	1.56	22.0	7	18	6	4	nw.	Alyce C. Conway.
Atlantic City	Atlantic	16	61	23.6	−10.0	44	15	−9	9	29	4.83	+1.47	1.80	17.6	12	8	8	12	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	17.8	−13.4	42	22	−12	9	31	4.01	−0.12	1.52	32.7	10	12	3	13	nw.	William D. Martin.
Sandy Hook	Monmouth	22	36	19.9	−12.2	38	22	−11	9	26	2.18	−1.57	0.60	21.4	9	12	6	10	nw.	U. S. Weather Bureau.
Means and extremes	...	...	...	20.4	−11.8	44	15	−12	9	31	3.64	−0.02	1.80	23.4	10	12	6	10	nw.	
For the State	...	...	...	18.6	−12.1	54	22	−26	9	53	2.77	−0.84	1.95	22.7	8	15	6	7	nw.	

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† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for February, 1934

Statious	Drainage Basin	Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.47												.06						.05	.30			T.			.95						1.83
Charlotteburg	Passaic	.21	.22											.07						*	.63			.10		.05	.70	.03					2.01
Culvers Lake	Delaware	.16	.22		.02									T.						.06	T.					.06	.40	.02					0.94
Dover	Passaic	.52												.10						.40	.20		.10			*	.95						2.27
Layton	Delaware	.11	.12		.02									T.						*	.39			.04		*	.58						1.26
Long Valley	Morris	.40	.40																	.20	.30						.60	.40					2.30
Newton	Delaware	.12	.04		T.			T.						.12						.35	.69			T.		.05	.30	.03					1.70
Phillipsburg	...do	.50	T.		T.			T.					T.	.03						.69	.21		.07			.18	.78						2.46
Sussex	Hudson	.31	.41		.04			T.						.20						T.	.22					.05	.85						2.08
The Red Sandstone Plain.																																	
Boonton||||	Passaic	T.	.40											.03							.40	.05		.04			.15	.12					1.19
Canoe Brook ||||	Essex	T.	.58		T.			T.						.06							.96	.15		T.	.09		.49	.29					2.62
Chatham ||	...do	T.	.59		T.	T.			T.					.24							.48	.44		.03	.05			.94					2.77
Elizabeth	Coast	.24	.56		T.			T.						.10						.19	.92			.12	.04	.13	1.16	.02					3.48
Flemington	Raritan	.20	.38											.08						.18	.41		T.	.13		.10	.37						1.85
Jersey City	Coast	.97			.01			T.						.10						.25	.45		.11			.20	.80						2.89
Lambertville	Delaware	.28	.38		T									.08							1.13		.06	.04		.13	.68	.04					2.77
Little Falls.||||	Passaic	.01	.59											.04							.78	.02		.10			.40	.24					2.18
New Bruuswick	Raritan	.22	.70		T.			T.						.05						.15	.85		T.	.16		.15	.50	T.					2.78
New Milford||||	Hackensack		.40											.06							1.36			.13			.58	.40					2.93
Paterson	Passaic	.26	.27		T.									.03						.22	.79		T.	.10		.13	.65	.01					2.46
Plainfield	Raritan	.82			T.			T.						.11						.33	.69		.10			*	.93						2.98
Ridgefield**	Hackensack	.70			T.	T.		T.					T.	.07						*	.68		.09			*	.82						2.36
Somerville	Raritan																																
Woodcliff Lake||||	Hackensack		.66											.09							1.19	.06		.13			.52	.37					3.02
New York, N. Y***	Coast	.98			.01			T.					T.	.10						.42	.24		.12	T.		.32	.61						2.80
The Southern Interior.																																	
Belleplain	Tuckahoe																																3.94
Bridgeton	Delaware	1.24										.09								.62			.15			1.01	.70						3.81
Burlington	Delaware	*	.80																	1.05			.15			*	.56						2.56
Camden***	..do	.65			T.	.02	T.						T.	.02						.36	.35		.13	T.		.25	.28						2.06
Freehold	Raritan	*	.85		T.		T.							.11						*	1.70		.01			*	1.95						4.62
Hammouton	Mullica																																
Hightstown	Raritan																																
Iudian Mills	Mullica		.79				T.													T.	.82		T.	.15		.30	1.16	T.					3.22
Lakewood	Metedeconk	.45	.60		T.									.10						.28	1.00		T.	.25		.28	.75	T.					3.71
Moorestown||||	Delaware		.62				T.							T.	.01						.70			.18			.49	.30					2.30
Northfield	Coast	.70	.25				.05		T				.10	.05				T.		.33	.50			.14		.66	1.16						3.94
Pemberton	Delaware	.40	.46		T.		T.							.03						.25	1.09		T.	.07	T	.16	.85	.01	T.				3.32
Pleasantville||||	Coast	T.	1.10				.05		.01	T.			.07	.03	T.			T.			1.02			.18	T.	T.	.51	.20					3.17
Port Norris	Maurice	.70	.39				T.						.15							.28	.72			.11		.52	1.10						3.97
Runyon	Coast	*	.90											.08						*	1.18					*	.85						3.01
Trenton***	Delaware	.66			T.	T.		T.					.01	.03						.55	.22		.11	T.		.25	.38						2.21
Trenton No. 2||||	...do		.73		T.	T.			T.					.06	T.						1.02			.13	T.		.42	.56					2.92
Tuckerton	Coast	*	.90									.08	.02	.02				T			.34					.58	.68						2.62
Phila., Pa***	Delaware	.72			T.	.01	.01						T.	.03						.73	.07		.15	T.		.43	.60						2.75
The Sea Coast.																																	
Asbury Park	Coast	.97	T.		T.									T.			T.			*	.95		*	.06	T.	*	1.56	T.					3.54
Atlantic City***	...do	.99			T.	.01	.01		.01			.10	.01	.03			T.	T.		1.00	.51		.15	T.		1.24	.77						4.83
Long Branch**	...do	.80			.02		.02						.06	.14						.79	.73		.29	T.		.39	.77						4.01
Sandy Hook***	...do	.50			.02			T.					T.	.04						.32	.28		.22	.01		.26	.53						2.18

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. || Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)					Wiud				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.18	30.91	28	29.26	13	16.4	41	ne.	25	72	61	66	54
Camden						10.2	32	nw.	23				
Long Branch	30.16	30.90	28	29.22	13					66	53	56	65
New York, N. Y	30.15	30.90	28	29.19	13	16.5	51	nw.	23	62	51	56	66
Philadelphia, Pa	30.19	30.95	28	29.25	13	13.5	32	nw.	13	57	52	52	60
Ridgefield	30.15	30.90	28	29.20	18								
Sandy Hook	30.15	30.90	28	29.19	13	16.1	43	nw.	13	76	68	72	57
Trenton	30.18	30.94	28	29.22	18	10.3	38	nw.	20	69	55	64	69

Daily Temperatures for February, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	34	33	29	27	31	24	32	28	8	26	35	35	32	26	46	31	29	40	40	33	39	47	40	20	19	22	20	26	....	....	....	30.4
	Minimum	22	12	5	0	15	2	−1	1	−15	−2	3	12	14	1	10	9	1	6	22	9	1	20	19	5	7	12	4	−14	....	....	....	6.0
Charlotteburg	Maximum	30	30	20	24	24	21	29	28	5	25	47	47	34	27	45	42	50	42	39	32	37	43	44	20	18	18	18	39	....	....	....	31.4
	Minimum	19	11	−1	9	15	−4	−2	−2	−21	−6	2	7	14	2	−1	0	4	−2	11	4	6	18	18	0	2	9	4	−2	....	....	....	4.1
Dover	Maximum	32	18	18	26	26	22	31	11	−1	....	35	34	32	20	47	31	29	40	39	18	37	43	....	18	12	20	15	25	....	....	....	26.1[b]
	Minimum	21	10	−1	−3	14	0	0	6	−19	−7	8	12	5	0	3	6	3	4	20	6	5	20	11	3	−1	12	4	−3	....	....	....	5.0
Layton	Maximum	31	31	22	27	24	21	32	19	0	31	38	36	31	33	46	33	28	40	37	30	40	48	41	15	15	20	20	30	....	....	....	28.9
	Minimum	22	10	−1	−8	11	−8	−8	−8	−21	−7	−7	5	5	−7	1	4	−8	−1	18	5	−8	20	13	3	−4	10	1	−23	....	....	....	0.3
Long Valley	Maximum	32	30	20	22	22	22	30	18	3	19	32	34	30	18	45	40	27	37	36	30	35	41	38	22	16	19	18	24	....	....	....	27.1
	Minimum	20	12	3	−8	−8	0	−4	0	−18	−3	0	8	14	−1	2	7	3	2	19	7	0	16	19	3	1	11	4	−12	....	....	....	3.5
Newton	Maximum	34	33	22	26	28	22	31	23	7	29	34	36	33	22	53	37	26	47	42	40	37	46	44	20	19	20	21	27	....	....	....	30.7
	Minimum	20	10	−1	1	14	−4	1	−7	−20	−6	7	18	5	−2	7	4	−2	5	18	5	1	28	14	1	2	8	3	−7	....	....	....	4.4
Phillipsburg	Maximum	33	32	23	29	27	22	33	17	11	25	36	35	33	20	47	36	27	37	37	24	36	43	35	20	18	22	18	24	....	....	....	28.6
	Minimum	23	14	5	2	19	5	3	−8	−2	1	3	17	12	3	14	11	5	9	21	11	6	23	12	6	10	13	5	−9	....	....	....	8.4
Sussex	Maximum	32	31	22	26	29	21	29	23	5	33	33	36	32	25	50	42	33	43	39	33	39	48	41	27	22	21	20	29	....	....	....	30.9
	Minimum	21	11	0	9	14	−4	−6	11	−17	−6	1	6	11	−2	7	5	−1	0	20	6	−2	22	12	−2	1	11	4	−13	....	....	....	4.4
The Red Sandstone Plain.																																	
Boonton§§	Maximum	33	32	22	27	26	21	32	10	4	29	36	35	30	33	48	18	29	39	50	19	35	54	36	23	16	20	16	27	....	....	....	28.6
	Minimum	8	14	1	3	9	2	−1	2	−20	−13	1	9	11	1	2	7	7	6	9	8	7	10	21	5	1	8	6	−10	....	....	....	4.1
Canoe Brook§§	Maximum	33	31	24	26	29	24	32	20	15	30	35	37	27	30	44	29	33	40	41	37	36	47	33	24	19	20	19	28	....	....	....	30.1
	Minimum	19	13	−4	−13	8	−5	−11	2	−26	−9	−4	5	14	0	−2	8	−4	−3	10	8	−6	13	22	2	11	11	0	−23	....	....	....	1.3
Elizabeth	Maximum	32	33	24	25	33	32	37	30	8	25	34	38	34	22	37	39	27	37	42	33	32	40	40	23	17	21	19	26	....	....	....	30.0
	Minimum	23	11	4	7	12	7	1	5	−15	−4	4	14	16	2	9	10	10	11	21	10	0	19	21	5	6	14	0	−7	....	....	....	7.7
Flemington	Maximum	33	53	32	30	39	26	35	32	10	33	37	37	35	26	42	40	32	42	39	33	38	42	39	26	29	25	23	27	....	....	....	33.4
	Minimum	18	13	4	−6	15	4	−4	4	−16	−2	−1	13	23	1	8	10	5	7	24	9	3	16	23	5	4	12	1	−16	....	....	....	6.3
Jersey City	Maximum	34	30	24	27	28	21	32	20	7	27	33	39	34	21	41	34	29	41	42	29	36	44	35	17	21	24	20	28	....	....	....	29.2
	Minimum	28	16	4	12	16	5	11	0	−14	−3	10	22	9	3	21	9	8	15	25	9	9	25	17	6	8	13	9	4	....	....	....	10.6
Lambertville	Maximum	32	31	23	25	29	22	31	18	7	25	34	38	31	20	39	36	28	39	37	25	37	45	35	20	15	21	18	25	....	....	....	28.1
	Minimum	22	9	2	6	15	4	6	0	−18	−3	12	20	14	0	10	10	5	9	21	9	7	18	19	3	5	11	4	−3	....	....	....	7.8
Little Falls§§	Maximum	33	28	29	28	34	26	35	17	10	32	37	37	31	30	53	20	30	45	43	34	39	46	34	23	19	22	19	28	....	....	....	30.8
	Minimum	14	16	−2	−2	12	2	−2	3	−18	−7	6	12	19	2	4	8	4	6	15	8	6	17	22	6	0	11	7	−10	....	....	....	5.7
New Brunswick	Maximum	33	32	24	24	27	23	32	29	7	23	33	41	34	18	38	39	28	36	42	32	37	43	37	27	18	21	19	22	....	....	....	29.2
	Minimum	21	14	1	−4	11	4	−5	4	−16	−5	1	15	17	−1	8	9	5	5	20	9	0	20	21	5	2	13	6	−6	....	....	....	6.2
Paterson	Maximum	33	32	27	27	30	23	33	29	10	30	36	35	33	23	48	42	28	43	41	33	38	42	37	19	16	20	20	29	....	....	....	30.6
	Minimum	25	15	4	1	19	4	3	2	−16	−3	10	15	17	2	10	8	8	10	25	8	8	22	22	5	6	12	8	−4	....	....	....	8.8
Plainfield	Maximum	32	29	24	24	25	23	33	19	6	26	35	39	34	22	40	34	32	40	42	32	37	44	34	17	18	21	20	29	....	....	....	29.0
	Minimum	19	14	1	0	12	3	−2	−2	−17	−3	4	13	10	1	6	9	6	6	20	8	0	17	17	4	3	13	5	−10	....	....	....	5.6
Ridgefield	Maximum	34	31	23	29	27	19	31	12	6	26	33	39	34	21	37	25	25	40	40	21	36	44	35	16	20	21	17	28	....	....	....	27.5
	Minimum	25	11	2	12	11	5	4	−10	−17	−6	10	16	10	−1	11	5	5	9	23	8	3	21	8	5	4	13	4	−4	....	....	....	6.7
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	35	31	23	27	29	20	31	21	8	27	33	39	34	21	41	26	28	41	42	27	35	43	36	18	21	25	20	27	....	....	....	28.9
	Minimum	30	11	4	15	17	5	13	−7	−14	−2	12	25	8	3	21	9	9	18	26	9	10	27	10	6	9	13	9	7	....	....	....	10.8
The Southern Interior.																																	
Belleplain	Maximum	36	33	24	....	35	27	37	32	32	....	38	40	35	27	53	37	....	47	....	38	33	48	32	20	28	....	20	....	....	....	....	34.2[f]
	Minimum	13	27	3	....	5	13	−1	10	−13	....	−3	24	23	0	14	15	....	5	....	12	−3	19	8	12	12	....	10	−12	....	....	....	8.4[e]
Bridgeton	Maximum	34	25	26	32	32	30	36	15	10	24	35	36	32	33	39	25	32	41	36	23	43	50	29	21	20	24	15	23	....	....	....	29.3
	Minimum	17	5	3	12	13	3	15	−12	−11	0	11	24	3	10	15	9	10	20	11	7	17	26	8	13	15	5	−5	−1	....	....	....	8.7
Burlington	Maximum	39	33	24	22	29	40	32	33	12	25	31	38	37	27	40	39	33	40	38	27	35	43	48	34	23	22	23	25	....	....	....	31.9
	Minimum	22	17	20	16	14	7	2	4	−14	−2	3	24	21	3	13	13	13	16	22	11	3	20	24	7	12	15	6	13	....	....	....	11.6
Camden	Maximum	37	32	20	27	28	21	33	22	7	22	32	36	34	21	40	27	29	40	38	22	36	44	36	22	18	23	17	24	....	....	....	28.1
	Minimum	30	16	1	3	13	4	−4	−5	−11	0	7	27	11	6	17	14	10	10	24	13	9	20	13	9	11	14	6	3	....	....	....	9.7
Freehold	Maximum	34	32	20	24	28	22	30	28	4	23	33	37	33	18	40	36	28	38	41	33	33	43	38	20	19	21	19	25	....	....	....	28.6
	Minimum	23	14	1	3	12	6	1	4	−20	−10	2	19	15	−2	9	11	2	5	19	10	7	22	20	5	5	16	6	−6	....	....	....	7.1
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	39	35	22	30	28	27	35	35	20	22	37	39	35	23	43	40	26	42	35	32	37	50	43	23	25	22	20	28	....	....	....	31.9
	Minimum	22	18	3	−4	9	10	10	−6	−25	−6	−5	25	23	3	10	14	7	1	18	13	0	20	23	8	7	17	6	−8	....	....	....	7.6
Lakewood	Maximum	36	34	20	28	27	25	34	30	9	22	38	37	35	20	41	38	28	35	41	33	34	42	39	24	22	25	21	26	....	....	....	30.1
	Minimum	23	17	2	−4	16	8	−6	8	16	−8	3	23	19	2	7	14	6	6	18	12	1	22	22	5	3	19	7	−6	....	....	....	8.0
Moorestown	Maximum	36	30	22	25	28	22	31	23	6	23	32	37	33	20	37	29	28	38	37	22	34	44	34	21	20	22	16	26	....	....	....	27.7
	Minimum	30	10	2	3	15	10	6	−4	−13	−4	3	26	9	4	18	14	7	8	20	13	6	20	12	8	13	14	7	−2	....	....	....	9.1
Pemberton	Maximum	36	34	19	21	29	23	30	31	9	18	32	34	35	20	39	37	28	36	40	34	33	49	42	23	20	22	20	18	....	....	....	29.0
	Minimum	22	15	1	−5	10	7	−7	7	−17	−4	−6	24	19	0	15	12	5	2	19	11	3	21	22	6	8	16	6	−10	....	....	....	7.2
Pleasantville§§	Maximum	37	35	23	35	32	25	38	21	17	29	40	38	34	37	44	35	30	36	39	34	34	48	34	33	32	27	25	23	....	....	....	32.7
	Minimum	8	20	8	6	18	12	0	16	−11	−10	3	20	27	2	7	16	10	10	20	14	5	14	32	9	11	16	8	−6	....	....	....	10.2
Runyon	Maximum	34	32	25	26	31	24	32	30	12	17	32	37	36	18	38	20	30	38	43	32	32	40	32	22	18	22	18	22	....	....	....	28.3
	Minimum	28	13	−5	−13	0	3	−14	6	−19	−12	−9	18	16	−3	16	0	−2	−5	14	10	−5	15	22	6	−7	15	7	−22	....	....	....	2.6
Trenton	Maximum	35	26	23	25	26	21	32	22	7	24	31	36	33	21	40	26	28	38	38	24	35	42	37	20	18	22	18	22	....	....	....	27.5
	Minimum	26	12	5	7	19	7	6	−8	−14	0	7	22	8	3	18	12	8	14	19	11	9	25	12	7	10	14	6	1	....	....	....	9.5
Tuckerton	Maximum	40	35	30	33	35	32	40	38	24	30	36	36	39	42	40	39	35	39	40	32	36	42	32	30	29	28	20	30	....	....	....	34.4
	Minimum	22	26	5	8	14	12	20	18	−12	−2	18	28	28	20	22	14	18	17	30	8	10	28	8	10	14	14	4	8	....	....	....	14.6
Philadelphia, Pa.	Maximum	37	34	24	31	31	24	36	27	10	25	32	39	35	23	42	32	30	38	37	27	34	47	39	23	20	24	19	23	....	....	....	30.1
	Minimum	31	18	9	17	21	14	15	−2	−11	3	13	28	12	7	23	15	13	23	20	14	14	28	14	11	15	16	10	9	....	....	....	14.3
The Sea Coast.																																	
Asbury Park	Maximum	36	33	19	28	28	25	33	29	6	22	38	39	35	19	41	36	28	33	38	32	35	40	38	19	26	25	20	27	....	....	....	29.6
	Minimum	27	17	4	10	4	15	9	6	−12	−6	8	25	15	2	16	15	16	14	24	13	7	27	19	6	12	13	0	1	....	....	....	11.0
Atlantic City	Maximum	38	33	28	36	32	25	38	31	9	28	36	36	34	33	44	36	29	35	38	32	34	43	36	22	32	31	19	24	....	....	....	31.8
	Minimum	33	19	10	17	22	14	14	2	−9	2	20	27	14	7	33	18	12	17	31	14	13	34	16	10	15	16	7	2	....	....	....	15.4
Long Branch	Maximum	35	29	20	30	25	22	32	22	5	23	37	38	33	17	40	22	27	38	40	32	31	42	37	18	21	21	19	22	....	....	....	27.8
	Minimum	27	13	1	0	14	8	3	−3	−12	−6	6	20	7	0	16	15	12	9	21	9	5	19	11	5	6	14	3	−4	....	....	....	7.8
Sandy Hook	Maximum	35	32	21	27	26	20	31	22	7	22	32	35	33	19	36	29	27	37	37	32	34	38	34	18	19	21	17	24	....	....	....	27.3
	Minimum	30	14	9	16	20	13	14	−4	−11	2	11	22	10	6	18	13	15	22	25	12	12	26	12	8	12	14	8	1	....	....	....	12.5

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

51.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION.
H. O. GEREN.
TRENTON, N. J.

Vol. XXXIX. MARCH, 1934. No. 3.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The weather continued cold during the month, though relatively not as cold as the preceding month when gaged by its departure from the normal. The average temperature was the lowest for March since 1926. Warm periods prevailed from the 3d to 7th, inclusive, and during the 17-18th. The highest temperatures were recorded during the latter period and were mostly in the high sixties and low seventies. Cold periods came on the 1st, during the 8-12th, inc., and the 19-26th, inc. The lowest temperatures for the month were registered quite generally on the 1st in the northern half of the State and on the 1st or 12th in the southern part. In the most northern section the lowest temperatures were from one to seven degrees below zero, while over the remainder they ranged between zero and twelve degrees above.

Precipitation occurred frequently. In fact, there were only about half a dozen days during which no rain or snow occurred in the State. The State average, however, was below the normal, amounting to only about 88% of it, but there was a wide variation as between stations, some receiving normal amounts, or above. The total snowfall ranged mostly between five and fifteen inches, but in the extreme southern part of the State it amounted to sixteen to eighteen inches, due to heavy falls on the 8th and 10th.

On account of the record breaking cold February and the continued cold of March, together with the frequent precipitation in the latter month, the usual early Spring work was almost at a standstill, so the season starts quite late. Floods occurred in the various rivers during the break-up of the ice the first few days of the month as a result of the jamming of the ice. Most of the damage was done by ice crashing against structures and trees.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 35 stations, was 36.5°, which was 2.6° below normal. The highest temperature was 77° at Long Branch on the 18th, and the lowest, —7°, at Layton on the 1st. The greatest daily range of temperature was 52° at Burlington on the 19th. The highest monthly mean temperature was 40.0° at Burlington, and the lowest, 33.4° at Layton.

The temperature departure from the normal for the year 1934, to date, by sections, is: The Highlands, —2.6°; Red Sandstone Plain, —3.4°; Southern Interior, —3.6°; Sea Coast, —3.6°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 3.31 inches, which was 0.47 inch below normal. The average total snowfall at 20 selected stations was 9.6 inches. The greatest monthly precipitation was 4.81 inches, at Dover, and the least, 1.64 inches at Boonton. The greatest amount of precipitation in any 24 consecutive hours was 2.40 inches at Ridgefield on the 31st. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 2 more than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, —1.83 inches; Red Sandstone Plain, —1.57 inches; Southern Interior, —1.57 inches; Sea Coast, —1.51 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 13 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 39 miles per hour from the north at Atlantic City on the 20th.

MISCELLANEOUS.

The per cent of possible sunshine was 52, or 9 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.17 inches, or 0.16 inch above normal. The highest reading was 30.78 inches at Atlantic City on the 1st, and the lowest 29.50 inches at Long Branch on the 5th.

The mean stage of the Delaware River at Phillipsburg was 4.2 feet, and the highest 16.0 feet on the 6th. At Trenton the mean stage was 3.0 feet, and the highest was 14.2 feet on the 5th. This stage of 14.2 feet was the highest recorded at Trenton since 1904.

Dense fog occurred on the following dates: 2, 3, 4, 5, 25, 26, 27 and 31. Thunderstorms occurred in scattered sections of the State on the 4th, 5th, 6th, 27th and 28th. Sleet fell in light amounts in various sections of the State on the 1st, 7th, 8th, 14th, 18th, 19th, 23d, 24th and 26th. Hail fell on the 6th, 24th and 28th.

COMPARATIVE DATA FOR MARCH

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	**30.4**	−8.7	66	2	**1.10**	−2.68	2.29	**0.23**	......	....	....	....	....
1886	37.7	−1.4	70	9	3.70	−0.08	5.27	2.59	......	....	....	....	....
1887	37.7	−1.4	61	8	3.34	−0.44	5.45	2.19	......	10	....	....	....
1888	32.8	−6.3	72	0	5.71	+1.93	8.22	3.75	......	11	....	....	....
1889	40.5	+1.4	67	19	3.79	+0.01	6.49	1.98	......	8	....	....	...
1890	37.6	−1.5	78	0	6.08	+2.30	7.92	4.14	......	14	....	....	....
1891	37.2	−1.9	68	4	5.06	+1.28	8.02	2.05	......	12	8	10	13
1892	34.4	−4.7	64	6	4.75	+0.97	7.21	3.11	......	9	10	12	9
1893	37.0	−2.1	68	6	3.73	−0.05	6.26	2.36	.....	10	10	10	11
1894	44.2	+5.1	83	12	1.77	−2.01	2.65	1.09	.... .	10	12	11	8
1895	36.7	−2.4	72	7	3.16	−0.62	4.66	1.77	4.0	10	12	8	11
1896	34.0	−5.1	69	−8	5.34	+1.56	7.38	3.14	13.2	11	13	8	10
1897	40.0	+0.9	77	18	2.78	−1.00	4.32	1.55	1.6	10	11	9	11
1898	45.1	+6.0	77	16	3.33	−0.45	4.25	2.56	3.0	12	9	10	12
1899	38.6	−0.5	73	13	6.54	+2.76	9.58	3.45	5.4	13	7	10	14
1900	35.6	−3.5	67	−9	3.51	−0.27	4.96	2.48	7.0	10	12	12	7
1901	39.2	+0.1	75	−8	4.64	+0.86	8.07	2.40	0.9	12	9	10	12
1902	43.9	+4.8	77	0	4.34	+0.56	7.20	3.16	5.7	11	12	10	9
1903	47.6	+8.5	79	13	5.13	+1.35	8.53	3.60	*T.*	10	11	8	12
1904	37.2	−1.9	72	1	3.43	−0.35	4.76	2.02	4.5	13	11	8	12
1905	39.8	+0.7	87	−7	3.95	+0.17	5.06	2.80	2.6	12	14	8	9
1906	34.4	−4.7	62	**−15**	5.09	+1.31	6.77	2.91	11.2	11	10	9	12
1907	41.2	+2.1	88	−11	3.04	−0.74	4.38	1.81	11.5	10	13	10	8
1908	41.8	+2.7	89	7	2.80	−0.98	4.92	1.06	3.5	12	11	9	11
1909	38.3	−0.8	74	−6	3.48	−0.30	4.66	2.31	4.6	13	12	10	9
1910	44.5	+5.4	88	10	1.22	−2.56	2.36	0.29	1.1	6	14	10	7
1911	37.6	+1.5	76	3	3.38	−0.40	4.50	2.64	5.3	11	10	12	9
1912	36.9	−2.2	72	3	**7.61**	+3.83	**9.61**	5.95	6.6	14	9	11	11
1913	44.8	+5.7	79	1	5.15	+1.37	7.73	2.47	0.1	12	10	9	12
1914	35.4	−3.7	75	−6	3.65	−0.13	6.45	2.02	**20.5**	10	13	10	8
1915	36.1	−3.0	63	11	1.13	−2.65	1.65	0.58	7.4	3	20	7	4
1916	31.7	−7.4	71	−7	3.48	−0.30	4.96	2.38	19.3	12	13	8	10
1917	38.2	−0.9	72	0	4.65	+0.87	7.14	2.28	9.8	13	12	8	11
1918	41.8	+2.7	82	8	2.06	−1.72	3.76	0.99	0.7	9	17	7	7
1919	43.2	+4.1	77	12	5.32	+1.54	7.40	3.77	1.6	13	14	7	10
1920	39.4	+0.3	79	−8	3.80	+0.02	5.36	2.29	5.6	10	17	5	9
1921	**49.1**	+10.0	**92**	11	3.03	−0.75	4.65	1.80	*T.*	11	14	10	7
1922	41.1	+2.0	82	2	4.52	+0.74	7.10	3.42	3.7	13	12	6	13
1923	38.0	−1.1	81	−3	4.09	+0.31	6.73	2.13	6.3	10	17	6	8
1924	38.8	−0.3	76	5	2.51	−1.27	5.69	0.80	2.7	8	16	6	9
1925	43.3	+4.2	80	1	3.47	−0.31	6.09	1.50	0.3	9	16	6	9
1926	35.1	−4.0	79	0	2.25	−1.53	3.15	1.52	0.4	7	16	9	6
1927	41.9	+2.8	81	9	1.46	−2.32	2.73	0.78	0.3	10	14	7	10
1928	38.3	−0.8	82	6	2.84	−0.94	3.82	1.70	4.9	10	14	8	9
1929	44.9	+5.8	81	5	3.07	−0.71	4.92	1.92	0.7	11	15	6	10
1930	40.0	+0.9	78	9	2.54	−1.24	3.80	0.44	0.1	7	16	7	8
1931	39.2	+0.1	64	12	4.14	+0.36	6.06	2.60	2.0	10	8	9	14
1932	36.6	−2.5	69	3	5.49	+1.71	7.70	3.91	2.5	9	14	6	11
1933	38.2	−0.9	70	8	4.94	+1.16	6.34	2.59	1.7	13	10	7	14
1934	36.5	−2.6	77	−7	3.31	−0.47	4.81	1.64	9.6	12	13	7	11
Period	39.1	....	92	−15	3.78	....	9.61	0.23	4.8	11	12	9	10

W. B. O. Philadelphia 4-26-34-875.

Climatological Data for March, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	^{a}35.8	−2.8	67	17	2	1	40	4.55	+0.86	0.96	7.5	12	16	8	7	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	34.6	−1.7	72	18	−1	1	42	3.94	−0.05	1.47	3.5	16	16	5	10	sw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	......	......	......	......	−2	12	....	2.88	−0.44	0.95	6.8	12	13	9	9	e.	Brice E. Riker.
Dover	Morris	600	50	34.4	−1.5	69	18	3	1	43	4.81	+0.79	1.48	7.0	14	9	11	11	......	William C. Harris
Layton	Sussex	480	33	33.4	−2.7	65	18	−7	1	47	2.28	−1.01	0.70	7.0	13	9	2	20	sw.	A. M. Depue.
Long Valley	Morris	520	4	34.4	......	68	18	−1	1	39	2.70	......	1.10	5.0	10	7	11	13	s.	S. N .Dilts.
Newton	Sussex	769	51	34.9	−1.1	68	17†	3	1	44	3.13	−0.26	0.93	7.0	13	11	3	17	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	35.8	−2.8	69	18	4	1	42	3.81	+0.47	0.87	5.5	14	15	6	10	......	Town Engineer.
Sussex	Sussex	442	39	36.1	−0.8	66	17	−2	1	42	3.71	+0.56	1.86	4.3	12	16	5	10	......	A. J. W. Mowatt
Means and extremes	......	......	....	34.9	−1.9	72	18	−7	1	47	3.53	+0.12	1.86	6.0	13	12	7	12	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	34.0	−1.4	74	19	−3	1	43	1.64	−2.00	0.56	......	8	18	1	12	ue.	John Kline.
Canoe Brook	Essex	173	4	34.8	......	71	18	−6	1	47	2.79	......	0.87	......	10	17	5	9	w.	N. J. Water Policy Comm.
Chatham	Morris	185	30	......	......	......	......	......	......	....	3.46	−0.58	0.92	......	12	13	8	10	......	Paul Molitor, Sr.
Elizabeth	Union	45	55	38.2	−1.2	71	18	6	1	41	3.00	−0.96	0.71	5.9	15	16	5	10	ne.	Union County Park Comm.
Flemington	Hunterdon	140	§48	37.2	−3.4	73	18	1	1	38	3.70	+0.04	1.20	8.0	14	16	4	11	ne.	Hiram E. Deats.
Jersey City	Hudson	10	36	37.6	−2.4	70	18	12	1†	37	3.60	−0.42	1.69	8.7	13	8	13	10	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	47	35.8	−3.9	71	18	7	12	41	2.68	−1.11	0.99	9.0	13	13	2	16	ne.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	36.8	−0.5	72	17	5	1	45	2.94	−0.83	0.94	4.5	11	14	4	13	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	81	36.8	−2.4	73	18	5	1	40	2.94	−0.62	0.98	7.0	15	14	8	9	w.	N. J. Experiment Station.
New Milford‡‡	Bergen	40	16	......	......	......	......	......	......	....	3.32	−0.03	0.96	......	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	37.4	−2.0	70	18	10	1	36	3.42	−0.53	1.28	4.9	11	13	6	12	sw.	William H. Meyer.
Plainfield	Union	120	46	36.0	−3.1	73	18	4	1	43	4.04	+0.08	1.29	8.2	13	10	11	10	sw.	S. K .Pearson.
Ridgefield	Bergen	80	17	35.6	−0.9	72	18	7	12	45	4.65	+0.58	2.40	5.2	13	9	10	12	ne.	George P. Kirsten.
Somerville	Somerset	70	51	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	......	......	......	......	......	......	....	3.14	+0.07	1.00	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y	......	365	64	37.2	−0.5	69	18	11	23	42	4.40	+0.76	2.54	8.5	14	7	11	13	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	36.4	−2.1	74	19	−6	1	47	3.24	−0.49	2.40	6.8	12	13	7	11	ne.	
The Southern Interior.																				
Belleplain	Cape May	30	40	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	A. F. Waldron.
Bridgeton	Cumberland	30	51	37.8	−4.8	75	18	7	11	50	3.48	−0.36	0.70	18.6	10	16	2	13	s.	Bennett K. Matlack
Burlington	Burlington	12	§48	40.0	−1.3	75	19	6	1	52	2.99	−0.72	1.30	7.4	7	16	3	12	sw.	Public Service Power Co.
Camden	Camden	20	2	37.6	......	75	18	7	1	46	2.40	......	0.73	8.4	13	8	10	13	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	36.4	......	73	18	7	12	36	3.19	−1.46	0.95	11.0	14	15	6	10	sw.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Geo. W. Lobley.
Hightstown	Mercer	146	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	H. M. Barrett.
Indian Mills‡‡	Burlington	76	45	38.2	−2.9	76	18	3	12	48	3.83	−0.25	0.74	14.5	15	8	9	14	ne.	James M. Armstrong.
Lakewood	Ocean	54	30	37.6	−2.7	75	18	7	1	37	3.31	−0.86	1.00	13.0	15	11	5	15	e.	R. W. Holman.
Moorestown	Burlington	62	71	36.6	−3.2	74	18	9	1	45	2.04	−1.64	0.50	10.5	13	11	8	12	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	27	......	......	......	......	......	......	....	4.51	+1.07	0.98	16.1	12	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	38.4	......	75	18	−1	1	41	2.30	......	0.79	9.0	13	13	3	15	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	36.6	......	66	5	3	12	34	3.72	+0.31	0.60	......	12	14	6	11	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	......	......	......	......	......	......	....	3.71	......	0.65	11.0	11	14	6	11	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	36.2	......	74	18	−4	1	49	3.39	+0.29	1.25	......	9	17	8	6	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	37.0	−2.1	72	18	12	12	43	2.92	−0.48	0.97	8.0	13	7	13	11	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	......	......	......	......	......	......	....	2.35	......	0.65	11.9	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	41	38.8	−2.3	59	18	12	11	26	3.32	−0.81	0.81	13.0	17	10	7	14	ne.	John H. Brown.
Philadelphia, Pa	......	114	63	39.9	−0.9	71	18	17	23	40	2.92	−0.47	0.77	10.2	14	7	11	13	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	37 6	−2.8	76	18	−4	1	52	3.16	−0.45	1.30	11.7	12	13	6	12	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	^{a}36.6	−2.9	65	18	11	12	29	3.68	+0.05	1.17	7.5	11	16	9	6	ne.	Alyce C. Conway.
Atlantic City	Atlantic	16	61	37.0	−1.6	59	14	13	12	23	4.68	+1.08	1.17	15.8	18	7	7	17	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	36.2	−3.2	77	18	9	1†	47	3.14	−1.03	1.04	10.9	15	10	5	16	w.	William D. Martin.
Sandy Hook	Monmouth	22	36	35.7	−3.6	68	18	11	1	37	3.05	−0.99	1.22	8.5	14	10	8	13	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	36.4	−2.8	77	18	9	1†	47	3.64	−0.22	1.22	10.7	14	11	7	13	sw.	
For the State	......	......	....	36.5	−2 6	77	18	−7	1	52	3.31	−0.47	2.40	9.6	13	12	7	12	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vinceutown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for March, 1934

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.85		.52	.11		.20		.08	.23			T.				.35						.12		.18	.35	.96			.60	4.55
Charlotteburg	Passaic		.13	.03	.02	.82	.12		.06	.06	.05	.32			.03				.02						T.	.09	.12	.17	1.30			.60	3.94
Culvers Lake	Delaware			.02	.05	.71	.02		.14	T.	.06	.17			T.				T.						.02		.12	.12	.95			.50	2.88
Dover	Passaic		*	.24	.08	.74			.15		.15	.30			.02				.02						.10		.17	*	1.36			1.48	4.81
Layton	Delaware			.06	.03	.57	.06		.15		.02	.06			.01				.07	T.					.08		.20	.27	.70				2.28
Long Valley	Morris		.20		T.	.70			.20		.10	.20													T.	.10	.10	*	1.10			*	2.70
Newton	Delaware			.20	.04	.46	.04		.15		.10	.03			T.				.04						.08	T.	.18	.28	.93			.60	3.13
Phillipsburg	...do		.06	.17	.27	.29	T.	T.	.16	T.	.18	.13			.09				.05					T.	.08		.17	.61	.68			.87	3.81
Sussex	Hudson					.89	.04		.12		*	.22			.11				T.						.09		.08	.04	1.86	.02		.24	3 71
The Red Sandstone Plain.																																	
Boonton ‖	Passaic			.20	T.	.46				.03		.10				T.				T						.07		.21	.56	.01			1.64
Canoe Brook ‖	Essex			.31		.79				.12		.34				.06				.03						.05		.19	.87	.03			2.79
Chatham ‖	...do			.33	.01	.85		T.		.32		.42	.06			.07				.09						.08		.22	.92	.09			3.46
Elizabeth	Coast			.33		.54			.11	.02	.12	.13			.07				.11	.02					.02	.07	.12	.04	.59			.71	3.00
Flemington	Raritan			.23	.02	.91		T.	.23		.08	.26			.02				.05					T.	.08	.05	.09	.03	1.17			.48	3.70
Jersey City	Coast			.30	.01	.17			.20		.22	.21			.03				.08		T.			T.	.08		.13	.02	.46			1.69	3.60
Lambertville	Delaware			.19				.02	.26		.14	.23			.03				.07					T.	.12	.07	.11	.03	.99			.42	2.68
Little Falls ‖	Passaic			.23		.92				.10		.25	.02			.07				.08						.07		.22	.94	.04			2.94
New Brunswick	Raritan			.23	.02	.32		T.	.20	.05	.10	.25			.03				.04	.03				T.	T.	.10	.07	.02	.50			.98	2.94
New Milford ‖	Hackensack			.29		.96				.26		.38				.08				.12						.08		.26	.83	.06			3.32
Paterson	Passaic			.21		.08			.12	T.	.13	.17			T.				.08						.05	.01	.21	T.	1.08			1.28	3.42
Plainfield	Raritan			.18	*	.84	T.		.18		*	.35			.08				.11					T.	.11		.16	*	.74			1.29	4.04
Ridgefield**	Hackensack			.31	.03	.53			.10		.27	.10			.05				.04						.06		.14	.02	.60			2.40	4.65
Somerville	Raritan																																
Woodcliff Lake ‖	Hackensack			.25		.78				.13		.32				.13				.10						.10		.25	1.00	.08			3.14
New York, N. Y***	Coast		.04	.27	.17	.03			.20		.24	.17			.03				.08		T.			T.	.07		.15	.02	.45			2.48	4.40
The Southern Interior.																																	
Belleplain	Tuckaboe																																
Bridgeton	Delaware		.26		.16				.53		.37									.24				.39	.22		T.	.58	.03			.70	3.48
Burlington	Delaware				.15				.35		*	.39							.24					T.					.56			1.30	2.99
Camden***	..do		.13	.05	.12			T.	.34		.15	.13			T.				.02					.04	.18		.03	.08	.40			.73	2.40
Freehold	Raritan			.35	.04	.12		T	.31			.28	.15		.09				.10	.05				T.	T.	.13	.05	.04	.53			.95	3.19
Hammonton	Mullica																																
Hightstown	Raritan																																
Indian Mills	Mullica	.10	T.	.08		.21			.35	.42	.20	.74			.04						.04			.16	.04	.12	.05		.60			.68	3.83
Lakewood	Metedeconk			.25	.06	.07		T.	.40		.25	.35			.03				T.	.03	T.			.05	.02	.10	.05	.05	.60			1.00	3.31
Moorestown ‖	Delaware			.17		.23		T.	.03	.39		.36	.02			.02				.02					.04	.19		.04	.50	.03			2.04
Northfield	Coast			.54	T	.29		T.	.35		.54	.15							T.	T.	.27			.35	.05	.06	.05	T.	.98			.88	4.51
Pemberton	Delaware			.15		.08	T.	T.	.38	.01	.06	.14			T.				T.	.01	T.			.05	.06	.06	T.	.02	.49			.79	2.30
Pleasantville ‖	Coast			.58		.35			.01	.40		.35	T			.01				T.	.29	T.			T.	.14		.10	.50	.39		.60	3.72
Port Norris	Maurice			.47		.20		T.	.53		.22	.27									.28			.22	.08	.15	T.		.65			.64	3.71
Runyon	Coast					.25			.28		*	.78													*	.20	.03		.60			1.25	3.39
Trenton***	Delaware	T.	.07	.08	.30	T.	T.	T.	.29	T.	.30	.03			T.				.13			T.		.01	.13		.03	.29	.30			.96	2.92
Trenton No. 2 ‖	...do			.19		.35		T.	T.	.35		.47	T.			.02				.12	T.		T.		.01	.17		.02	.65	T.			2.35
Tuckerton	Coast			.61		.16		.02	*	.14	*	.50				.04				.12	.02			.30	.20	.06	.09	.04	.81			.21	3.32
Phila., Pa***	Delaware	T	.09	.09	.17	T.		T.	.35		.38	.11			.01				.09					.04	.17		.01	.35	.29			.77	2.92
The Sea Coast.																																	
Asbury Park	Coast			.25	.22	.12	T.	T.	.35			.51			T.				.09					T.	.09		.04	.04	.80			1.17	3.68
Atlantic City***	...do	T.	.05	.51	.13	.02	T.	.01	.30		.54	.10			.02				.02	.03	.24			.42	.09		.06	.03	.94			1.17	4.68
Long Branch**	...do		.05	.11	.10	.07	T.	T.	.38		.34	.22			.02				.06				T.	.04	.02		.03	.02	.64			1.04	3.14
Sandy Hook***	...do		.04	.13	.15	.02	T.	T	.23		.27	.09			.06				.15				T	T.	.08		.10	.03	.49			1.21	3.05

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.19	30.78	1	29.61	5	17.2	39	n.	20	82	77	82	43
Camden						9.6	34	w.	6				
Long Branch	30.15	30.77	1	29.50	5					71	60	66	60
New York, N. Y	30.16	30.76	1	29.53	5	14.5	46	n.	18	69	57	64	59
Philadelphia, Pa	30.19	30.76	1	29.58	5	13.9	40	sw.	6	68	58	66	50
Ridgefield	30.16	30.75	1	29.53	5								
Sandy Hook	30.16	30.76	1	29.53	5	14.4	38	w.	6	80	74	77	50
Trenton	30.18	30.76	1	29.54	5	10.4	35	sw.	6	74	61	72	55

Daily Temperatures for March, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	42	44	50	48	62	54	42	34	35	33	32	34	48	42	....	58	67	65	43	52	51	43	25	32	49	43	58	56	64	63	46	47.2[a]
	Minimum	2	16	24	35	40	33	30	35	13	19	20	9	21	30	....	25	27	31	14	27	24	24	12	24	22	24	34	35	24	30	37	24.4[a]
Charlotteburg	Maximum	37	46	55	52	60	58	52	38	33	27	27	32	45	49	44	54	64	72	39	45	43	46	47	32	44	46	62	62	59	65	55	48.1
	Minimum	−1	23	17	38	41	31	27	25	11	10	16	6	17	32	20	20	22	32	14	21	19	19	6	20	10	16	31	33	23	23	30	21.0
Dover	Maximum	36	49	55	54	61	48	41	33	34	27	31	33	45	50	44	55	65	69	42	48	48	40	24	30	45	38	63	50	59	58	44	45.8
	Minimum	3	19	33	38	38	32	29	27	14	19	16	7	23	29	21	24	25	26	16	24	20	18	9	21	17	20	33	34	24	26	31	23.1
Layton	Maximum	40	50	58	55	60	48	41	36	35	28	30	40	46	49	47	56	64	65	40	50	49	42	28	30	44	43	60	50	61	60	43	46.7
	Minimum	−7	9	35	36	39	32	28	23	10	16	16	−5	19	30	15	24	22	25	13	20	18	17	8	21	12	18	30	33	20	23	27	20.2
Long Valley	Maximum	35	45	52	52	59	53	53	40	33	28	30	30	43	48	40	53	63	68	38	48	48	44	27	29	43	34	62	60	59	59	45	45.8
	Minimum	−1	19	33	34	41	33	27	25	11	19	18	14	15	30	21	21	24	31	17	24	20	27	10	21	15	20	33	33	25	24	31	23.1
Newton	Maximum	35	51	56	51	63	63	45	35	34	33	31	33	45	53	45	43	68	68	40	48	51	49	26	32	45	39	65	56	63	62	49	47.6
	Minimum	3	7	32	35	42	31	27	26	13	16	17	6	20	31	18	29	25	25	15	22	21	20	8	20	13	22	32	32	23	29	29	22.2
Phillipsburg	Maximum	36	45	52	51	60	49	40	34	36	30	32	34	45	47	46	57	65	69	38	51	50	40	25	32	44	38	61	53	60	61	44	46.0
	Minimum	4	15	34	36	37	35	32	25	13	22	17	10	25	31	23	27	28	27	21	29	26	18	13	25	17	25	36	36	39	29	34	25.5
Sussex	Maximum	39	45	55	55	64	60	46	37	36	35	28	40	49	46	51	56	66	61	43	50	51	45	35	32	51	48	61	61	64	65	61	49.5
	Minimum	−2	10	35	36	39	34	29	25	12	19	20	0	19	34	19	25	24	31	17	24	20	25	10	22	10	20	33	34	22	27	31	22.7
The Red Sandstone Plain.																																	
Boonton§§	Maximum	34	45	50	51	57	57	41	35	34	24	31	33	45	52	46	53	63	74	47	47	49	35	30	33	46	41	64	41	59	60	47	45.9
	Minimum	−3	6	17	35	37	35	29	26	14	19	20	7	12	30	24	21	26	31	17	22	21	28	11	14	21	21	29	35	24	26	32	22.2
Canoe Brook§§	Maximum	41	46	54	54	60	54	43	41	36	28	33	36	49	54	49	55	66	71	57	49	50	40	35	39	46	41	65	41	60	59	52	48.5
	Minimum	−6	7	32	33	36	30	28	22	9	20	20	2	17	32	22	12	21	33	15	24	12	29	11	16	8	17	33	35	20	23	32	21.0
Elizabeth	Maximum	36	49	48	51	65	65	54	44	36	40	37	39	49	52	44	56	70	71	38	49	50	49	34	32	46	45	65	64	57	64	50	50.0
	Minimum	6	18	34	37	40	36	31	29	17	22	22	11	26	32	22	24	29	36	22	29	25	32	13	24	19	24	36	37	27	29	34	26.5
Flemington	Maximum	38	44	49	54	64	58	46	35	39	35	39	36	47	51	50	58	67	73	41	50	53	49	33	34	51	42	65	63	64	61	53	49.7
	Minimum	1	15	33	35	39	34	31	29	12	21	21	7	18	28	24	24	29	35	19	28	23	31	12	22	18	23	34	35	28	27	33	24.8
Jersey City	Maximum	37	45	51	56	62	50	44	38	36	30	32	34	49	53	46	56	61	70	40	48	45	44	29	34	49	40	62	49	60	60	45	46.9
	Minimum	12	24	36	41	45	35	32	28	21	23	21	13	28	32	26	28	38	33	20	27	28	21	12	25	25	31	37	34	29	37	35	28.3
Lambertville	Maximum	34	45	48	53	61	50	40	32	34	29	31	32	44	49	44	55	65	71	40	49	51	45	28	33	45	38	63	50	58	59	43	45.8
	Minimum	10	20	33	40	46	33	31	28	15	20	19	7	21	26	24	25	33	30	19	26	23	28	11	22	20	24	34	35	36	30	32	25.8
Little Falls§§	Maximum	35	47	50	54	69	53	41	38	39	31	34	36	49	54	48	58	72	71	58	49	46	40	34	38	49	42	66	46	63	63	58	49.4
	Minimum	5	15	33	32	36	33	31	25	18	20	20	8	22	33	24	23	27	30	19	26	22	30	11	16	19	22	33	35	26	27	33	24.3
New Brunswick	Maximum	35	45	52	52	62	60	48	35	34	33	31	32	45	52	40	57	68	73	36	48	51	48	32	33	45	44	67	66	60	58	46	48.0
	Minimum	5	19	34	37	39	35	29	29	14	21	21	8	21	34	25	23	28	36	20	28	23	32	12	21	19	24	34	36	27	28	34	25.7
Paterson	Maximum	36	47	57	51	63	55	42	36	36	33	32	35	48	51	47	56	65	70	41	47	51	41	27	34	49	42	65	56	62	60	48	47.8
	Minimum	10	23	36	41	41	37	32	29	18	21	21	11	26	33	26	27	30	34	20	27	25	26	13	23	24	26	34	36	28	30	33	27.1
Plainfield	Maximum	37	44	52	54	64	51	44	38	36	30	35	34	49	54	46	57	69	73	40	50	52	40	23	36	49	37	65	54	61	60	40	47.5
	Minimum	4	25	34	38	45	34	29	28	16	20	21	9	19	32	23	23	26	32	20	26	21	21	12	23	16	22	34	33	24	26	34	24.5
Ridgefield	Maximum	37	45	50	52	62	48	42	37	35	29	31	33	48	52	44	54	58	72	42	46	43	43	30	33	48	40	60	48	60	58	42	45.8
	Minimum	9	21	31	31	40	35	29	27	15	22	21	7	27	30	27	26	35	27	19	27	24	17	12	24	22	25	35	30	28	28	33	25.3
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	37	45	50	56	60	49	43	37	35	29	31	33	47	52	44	54	58	69	39	46	43	44	29	34	48	40	60	46	59	59	47	45.9
	Minimum	15	26	36	42	46	35	32	26	21	24	19	13	29	32	27	29	42	27	20	28	29	17	11	26	27	32	38	34	30	39	35	28.6
The Southern Interior.																																	
Belleplain	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	35	45	54	59	65	54	40	34	37	31	31	35	51	53	48	59	66	75	40	51	50	43	35	37	45	55	62	44	61	60	52	48.6
	Minimum	10	30	40	38	36	30	31	9	26	21	7	11	34	28	26	30	43	25	27	25	38	11	12	23	25	35	38	28	27	36	39	27.1
Burlington	Maximum	34	42	52	61	63	65	57	40	36	45	36	36	48	52	44	58	69	74	75	50	53	63	36	36	45	48	68	67	59	63	59	52.7
	Minimum	6	18	34	37	43	36	33	31	13	23	22	12	24	33	26	24	29	49	23	29	24	32	15	19	20	26	36	37	29	28	36	27.3
Camden	Maximum	35	40	53	60	63	55	42	35	38	31	30	34	48	54	45	58	71	75	43	50	54	43	23	36	45	42	68	46	58	64	46	47.9
	Minimum	7	21	35	38	44	37	32	29	21	23	17	14	28	31	28	25	29	29	24	30	25	23	16	21	25	25	37	39	29	28	35	27.3
Freehold	Maximum	36	46	49	56	62	56	45	34	36	30	31	33	46	51	40	57	67	73	37	47	50	43	31	34	45	40	65	60	58	58	43	47.1
	Minimum	9	21	34	41	43	36	31	29	14	23	22	7	20	34	28	25	31	37	21	28	23	31	13	19	19	26	35	37	27	28	35	26.7
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	40	50	55	60	64	60	50	35	40	35	30	31	50	54	44	60	68	76	43	48	53	50	35	37	45	44	68	60	60	62	47	50.1
	Minimum	5	20	35	44	46	38	30	30	11	25	22	3	18	34	30	21	27	38	24	30	20	35	16	18	24	22	20	40	28	24	35	26.2
Lakewood	Maximum	37	46	52	59	62	56	45	36	36	33	32	32	50	54	38	58	65	75	39	46	49	44	34	36	43	41	65	60	54	53	44	47.5
	Minimum	7	20	35	38	40	37	33	31	14	27	26	10	23	36	31	23	28	39	23	31	24	34	15	20	25	22	37	38	29	23	37	27.6
Moorestown	Maximum	34	41	52	60	61	47	40	35	36	29	32	33	48	43	45	58	68	74	42	50	52	42	22	36	45	42	67	41	58	61	48	46.5
	Minimum	9	19	47	40	45	32	31	24	18	23	16	10	28	30	27	25	31	29	23	30	25	20	15	22	21	27	36	35	28	29	36	26.8
Pemberton	Maximum	38	45	50	59	63	55	50	35	37	32	34	32	49	54	44	59	70	75	41	49	54	47	35	37	46	42	68	62	59	61	47	49.3
	Minimum	−1	19	35	39	45	37	31	31	15	25	23	5	23	38	29	24	29	38	24	31	25	35	16	19	23	25	38	39	29	28	35	27.5
Pleasantville§§	Maximum	34	42	56	57	66	60	46	38	39	33	33	37	43	58	41	49	56	65	49	44	44	43	42	38	42	48	55	48	49	50	48	46.9
	Minimum	4	19	32	37	40	37	29	31	12	22	22	3	16	36	31	19	26	41	25	27	22	36	17	17	27	20	36	41	30	22	38	26.3
Runyon	Maximum	38	44	52	62	64	64	52	35	36	32	34	34	49	52	54	58	70	74	38	62	52	42	35	34	49	48	64	44	61	58	55	49.9
	Minimum	−4	26	35	36	36	31	31	28	18	14	22	6	21	28	16	14	21	31	19	20	15	31	12	16	16	14	32	36	21	20	35	22.5
Trenton	Maximum	33	41	54	57	64	51	42	35	36	30	31	33	47	52	46	57	68	72	40	49	51	43	23	35	44	41	67	44	59	59	44	46.6
	Minimum	13	20	36	42	44	37	32	26	19	21	18	12	27	30	25	27	34	29	21	29	29	20	13	23	24	27	36	36	29	32	35	27.3
Tuckerton	Maximum	36	40	52	50	58	50	42	42	41	35	38	40	50	44	40	48	55	59	42	45	50	49	40	45	52	44	54	50	50	51	46	46.4
	Minimum	18	25	32	38	38	34	31	34	24	28	12	25	30	32	34	34	38	36	25	30	30	38	17	28	36	36	38	40	38	32	34	31.1
Philadelphia, Pa.	Maximum	33	41	55	59	63	52	43	40	36	35	32	34	50	53	47	58	68	71	40	51	53	49	25	36	46	44	67	50	59	64	47	48.4
	Minimum	20	26	39	49	46	39	35	31	25	25	20	18	30	33	30	31	43	31	25	32	35	24	17	25	27	32	39	39	33	37	38	31.4
The Sea Coast.																																	
Asbury Park	Maximum	34	45	54	58	63	52	44	35	37	29	32	32	42	55	37	44	45	65	36	....	40	41	41	35	40	39	46	51	45	48	41	43.5[a]
	Minimum	26	26	33	37	36	38	33	26	18	27	25	11	25	35	30	19	34	36	27	....	30	30	18	19	28	31	36	39	31	31	37	29.8[a]
Atlantic City	Maximum	33	39	55	54	59	53	44	36	38	34	31	33	42	59	38	43	48	55	34	38	42	45	28	37	41	41	49	50	45	46	46	43.1
	Minimum	18	33	38	41	40	37	34	28	21	27	20	13	31	36	32	32	39	33	26	30	29	27	19	28	30	32	41	40	33	31	38	30.9
Long Branch	Maximum	34	47	55	60	64	50	45	32	36	29	31	33	47	54	37	55	58	77	34	43	42	40	26	35	42	43	61	49	51	22	43	45.3
	Minimum	9	21	40	40	43	35	31	24	15	23	18	9	26	32	24	23	30	30	24	32	25	26	16	24	23	26	38	38	30	28	37	27.1
Sandy Hook	Maximum	34	44	47	47	56	48	40	34	35	30	30	31	47	47	37	53	55	68	32	45	40	39	24	34	42	39	58	45	53	50	44	42.8
	Minimum	11	22	35	34	41	35	33	28	23	23	20	16	27	34	30	28	34	31	25	31	31	21	16	24	28	31	36	37	33	34	35	28.6

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Pleasantville**	Evaporation	*	*	.580	*	.350	*	*	.170	.400	*	.350	*	*	*	.010	.160	.080	.080	.128	*	.098	.064	*	*	.140	*	.100	*	.170	*	*	2.998
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	37	83	121	80	....	....	92	....	....	....	....	....	97	103	44	....	......
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

551.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

THE LIBRARY OF THE
JUN 21 1934

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. APRIL, 1934. No. 4.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

No markedly abnormal conditions prevailed during the month, judged by the averages, as both the temperature and precipitation were near the State normals. However, the course of the temperature was somewhat contrary to the usual trend, the third decade averaging slightly colder than the first, with the middle decade average between the two. The highest points reached were in the high 70's and low 80's and occurred on the 2d and 24th. The lowest were mostly in the 20's, except near the sea coast where they were in the low thirties, and occurred on scattered dates, namely, the 5th, 13th, 14th, and during the period from the 26th to 29th, inc.

Precipitation occurred quite frequently but the amount for the State as a whole was only slightly above the normal. Practically all of it was in the form of rain, or of snow melting as it fell, as no more than a trace of snow was reported from any station. The number of rainy days was well above the normal as was also, somewhat paradoxically, the number of clear days. The State average rainfall was 108% of the normal with the corresponding figures for the various sections as follows: The Highlands and Kittatinny Valley, 117%; Red Sandstone Plain, 98%; Southern Interior, 89%; Seacoast section, 80%.

The crop growing season is estimated to be about two weeks late at the close of the month.

TEMPERATURE.

The monthly mean temperature of the State, as deduced from observations of 35 stations, was 49.4°, which was 0.3° below normal. The highest temperature was 85° at Boonton on the 24th, and the lowest, 21°, at Layton on the 13th. The greatest daily range of temperature was 49° at Layton on the 9th. The highest monthly mean temperature was 52.2° at Burlington, and the lowest, 46.5° at Layton.

The temperature departure from the normal for the year 1934, to date, by sections, is: The Highlands, —1.8°; Red Sandstone Plain, —2.6°; Southern Interior, —2.8°; Sea Coast, —2.8°.

PRECIPITATION.

The mean total precipitation of the State, as deduced from observations of 42 stations, was 3.89 inches, which was 0.28 inch above normal. The greatest monthly precipitation was 6.42 inches, at Little Falls, and the least, 1.74 inches at Tuckerton. The greatest amount of precipitation in any 24 consecutive hours was 2.55 inches at Little Falls on the 1st. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 3 more than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, —1.21 inches; Red Sandstone Plain, —0.89 inch; Southern Interior, —1.97 inches; Sea Coast, —2.26 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 12 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 45 miles per hour from the southeast at Atlantic City on the 16th.

MISCELLANEOUS.

The per cent of possible sunshine was 65, or 8 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.01 inches, or 0.01 inch above normal. The highest reading was 30.72 inches at Ridgefield on the 30th, and the lowest 29.27 inches at Long Branch on the 12th.

The mean stage of the Delaware River at Phillipsburg was 6.6 feet, and the highest 9.4 feet on the 13th. At Trenton the mean stage was 3.8 feet, and the highest was 5.1 feet on the 14th.

Dense fog occurred on the following dates: 1, 7, 16, 17, 19 and 20. Thunderstorms were observed on the following dates: 6, 7, 11, 12, 13, 14, 20, 24 and 25. Killing frost occurred as late as the 30th at most stations in the State except along the coast and along the lower Delaware where it occurred around the 5th.

ERRATA.

December 1933: Boonton, maximum temperature should be 63° on the 24th. Lakewood, maximum temperature should be 63° on the 1st. Pleasantville, mean minimum temperature should be 24.6° and monthly mean 35.3°. Runyon, mean minimum temperature should be 16.9° and monthly mean 28.8°. January 1934: Ridgefield, maximum temperature on the 2d should be 40°, mean maximum temperature should be 41.2° and monthly mean 33.0° with a departure of +4.5°. February 1934: Indian Mills, maximum temperature should be 50° on the 22d. Little Falls, date of maximum temperature should be on the 15th.

COMPARATIVE DATA FOR APRIL

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	48.4	−1.3	88	26	2.79	−0.82	2.86	0.89					
1886	50.6	+0.9	86	27	3.40	−0.21	5.48	1.86	......	....	....	....	....
1887	47.3	−2.4	87	16	2.70	−0.91	3.77	0.91	......	....	....	....	....
1888	47.9	−1.8	92	22	3.28	−0.33	4.68	1.89	......	7	....	....	....
1889	51.2	+1.5	83	25	5.32	+1.71	7.25	2.92	......	9	....	....	....
1890	50.4	+0.7	86	21	2.65	−0.96	4.58	1.89	......	12	....	....	....
1891	52.0	+2.3	88	20	2.19	−1.42	3.80	1.39	......	8	....	....	....
1892	49.3	−0.4	87	19	2.49	−1.12	4.41	1.05	......	8	13	11	6
1893	49.2	−0.5	82	19	5.21	+1.60	7.12	2.97	......	8	9	13	8
1894	50.3	+0.6	88	10	3.09	−0.52	4.86	1.71	......	11	9	10	12
1895	49.1	−0.6	89	19	4.88	+1.27	7.75	3.47	......	9	12	9	9
1896	52.4	+2.7	**98**	12	**1.35**	−2.26	2.30	0.64	T.	10	11	7	12
1897	50.4	+0.7	89	19	3.79	+0.18	6.98	2.17	3.1	7	13	10	7
1898	47.8	−1.9	81	13	3.74	+0.13	4.94	2.17	T.	9	14	11	5
1899	49.9	+0.2	88	18	1.73	−1.88	3.25	**0.48**	2.9	11	8	11	11
1900	50.8	+1.1	82	18	2.29	−1.32	3.03	1.59	T.	4	16	10	4
1901	48.3	−1.4	89	23	6.31	+2.70	**10.22**	3.46	T.	6	14	9	7
1902	50.2	+0.5	93	20	3.62	+0.01	5.99	2.45	0	12	8	7	15
1903	50.9	+1.2	92	18	3.97	+0.36	7.03	2.40	0	9	10	11	9
1904	46.7	−3.0	85	16	3.42	−0.19	4.71	2.00	0	9	13	7	10
1905	49.9	+0.2	84	18	2.88	−0.73	4.03	1.53	0.1	10	9	12	9
1906	51.2	+1.5	87	17	3.64	+0.03	6.42	1.17	0.1	10	12	11	7
1907	**45.2**	−4.5	83	19	3.78	+0.17	8.67	2.06	T.	8	15	10	5
1908	51.2	+1.5	93	13	2.72	−0.89	3.86	1.42	4.8	11	11	9	10
1909	50.2	+0.5	88	17	5.97	+2.36	8.90	3.84	T.	11	14	9	7
1910	53.5	+3.8	88	20	5.34	+1.73	7.56	3.43	0.8	13	10	11	9
1911	47.4	−2.3	88	14	4.11	+0.50	5.58	2.87	0	12	9	11	10
1912	50.4	+0.7	82	18	3.56	−0.05	6.02	1.81	2.6	11	10	10	10
1913	52.1	+2.4	89	19	5.78	+2.17	8.53	4.14	0	14	9	10	11
1914	48.4	−1.3	89	16	3.67	+0.06	4.78	2.35	T.	11	14	7	9
1915	54.4	+4.7	96	20	2.71	−0.90	4.13	1.28	0	11	13	10	7
1916	48.2	−1.5	85	21	3.32	−0.29	6.14	0.90	**11.5**	9	14	10	6
1917	48.8	−0.9	88	21	2.39	−1.22	3.54	1.19	4.4	13	10	9	11
1918	49.8	+0.1	81	22	4.05	+0.44	5.79	2.88	4.7	9	15	8	7
1919	49.3	−0.4	85	15	3.06	−0.55	4.79	2.20	2.6	12	11	8	11
1920	48.0	−1.7	85	13	4.50	+0.89	6.06	2.90	T.	10	13	7	10
1921	**56.3**	+6.6	87	20	3.57	−0 04	5.20	1.86	T.	13	12	9	9
1922	51.0	+1.3	89	18	2.55	−1.06	4.12	1.57	0.4	11	13	6	11
1923	50.0	+0.3	91	**3**	3.55	−0.06	6.59	2.27	T.	10	15	7	8
1924	48.0	−1.7	81	18	6.15	+2.54	9.23	4.74	0.5	9	16	6	8
1925	51.4	+1.7	88	15	2.40	−1.21	3.35	1.31	6.6	11	15	6	9
1926	46.4	−3.3	87	14	2.05	−1.56	2.97	1.39	0	9	15	7	8
1927	47.5	−2.3	93	17	2.42	−1.19	3.97	1.00	T.	8	13	10	7
1928	47.4	−2.3	85	16	5.26	+1.65	7.16	3.82	0.3	9	14	7	9
1929	51.1	+1.4	94	25	**6.43**	+2.82	8.74	4.63	0.9	12	12	8	10
1930	47.6	−2.1	79	18	2.34	−1.27	3.72	0.50	T.	15	10	5	15
1931	49.8	+0.1	80	20	2.85	−0.76	5.17	1.53	T.	9	13	7	10
1932	48.3	−1.4	82	18	2.71	−0.90	4.69	1.16	T.	9	15	6	9
1933	50.4	+0.7	85	20	4.84	+1.23	7.09	3.52	0.1	7	15	7	8
1934	49.4	−0.3	85	21	3.89	+0.28	6.42	1.74	0.2	11	12	7	11
Period	49.7	....	98	3	3.61	....	10.22	0 48	T.	13	15	6	9

W. B. O. Philadelphia 5-26-34-875.

Climatological Data for April, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	50.1^{a}	+1.0	80	24	28	13	41	4.85	+1.09	0.76	0	11	14	6	10	...	Miss C. S. Hixsou.
Charlotteburg‡‡	Passaic	719	42	48.3	+1.7	77	24	22	13†	45	4.88	+0.56	1.55	0	14	17	3	10	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	...	...	...	...	24	13	...	3.75	+0.22	1.00	T.	12	18	4	8	s.	Brice E. Rlker.
Dover	Morris	600	50	47.6	+0.2	76	2†	26	5†	43	3.61	−0.45	0.97	0	14	9	10	11	...	William C. Harris
Layton	Sussex	480	33	46.5	−0.6	78	24	21	13	49	5.06	+1.57	1.53	0	14	15	2	13	w.	A. M. Depue.
Long Valley	Morris	520	4	47.4	...	75	24	24	13	41	3.66	...	0.78	T.	12	12	9	9	s.	S. N .Dilts.
Newton	Sussex	769	51	48.8	+0.8	74	2	22	26	40	4.28	+0.75	1.13	T.	13	17	2	11	sw.	Irving J. Keru.
Phillipsburg	Warren	363	§51	49.8	+0.2	78	24	29	13	40	2.99	−0.40	0.81	T.	13	16	7	7	...	Town Engineer.
Sussex	Sussex	442	39	49.8	+1.4	79	18†	26	13†	43	5.14	+1.61	2.08	T.	13	17	3	10	...	A. J. W. Mowatt
Means and extremes	...	...	...	48.6	+0.7	80	24	21	13	49	4.25	+0.62	2.08	T.	13	15	5	10	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	47.8	−0.3	85	24	26	14†	43	4.01	+0.11	1.28	...	11	15	2	13	ne.	John Kline.
Canoe Brook	Essex	173	4	47.6	...	78	24	22	29	44	5.42	...	1.64	...	14	17	7	6	w.	N. J. Water Policy Comm.
Chatham	Morris	185	30	...	...	...	...	...	...	...	5.29	+1.07	1.52	...	14	15	6	9	...	Paul Molitor, Sr.
Elizabeth	Union	45	55	50.3	−0.6	77	2†	29	13	37	4.43	+0.59	1.15	0	15	18	5	7	e.	Union County Park Comm.
Flemington	Hunterdon	140	§48	51.4	+1.2	81	2	26	13	46	4.61	+0.99	0.90	0	13	18	4	8	sw.	Hiram E. Deats.
Jersey City	Hudson	10	36	50.0	−0.2	77	2	34	5†	29	3.82	+0.07	0.89	T.	15	12	11	7	s.	S. K. Pearson.
Lambertville	Hunterdon	430	47	49.1	−1.1	76	24	28	13	36	3.88	+0.08	0.83	0	16	15	6	9	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	50.0	+1.7	80	24	28	5	42	6.42	+2.26	2.55	0	16	12	7	11	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	81	49.6	−0.1	78	24	30	13†	36	3.70	+0.09	0.84	0	13	16	9	5	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	...	...	...	...	...	...	...	4.88	+1.46	1.28	...	12	...	...	...	...	Hackensack Water Co
Paterson	Passaic	80	64	50.2	−0.5	80	24	30	5†	39	3.76	−0.07	1.14	0	14	16	4	10	w.	William H. Meyer.
Plainfield	Union	120	46	49.0	−0.4	79	24	29	5†	40	4.16	+0.37	0.99	T.	13	11	10	9	nw.	S. K .Pearson.
Ridgefield	Bergen	80	17	48.6	+0.7	77	2	29	5	39	3.84	+0.39	1.12	0	14	13	7	10	se.	George P. Kirsteu.
Somerville	Somerset	70	51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	...	...	...	...	...	...	...	4.90	+1.46	1.29	...	12	...	...	...	...	Hackensack Water Co.
New York, N. Y.	...	365	64	49.5	+0.1	75	2	34	28	27	3.16	−0.07	0.92	T.	15	11	8	11	s.	U. S. Weather Bureau.
Means and extremes	...	...	...	49.4	0.0	85	24	22	29	46	4.51	+0.68	2.55	T	14	15	6	9	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	50.6^{b}	+0.1	81	2	26	26	43	2.78	−1.92	...	...	...	15	7	8	s.	A. F. Waldrou.
Bridgeton	Cumberland	30	51	50.6	−1.7	79	2†	30	27	39	3.17	−0.43	0.84	0	10	20	3	7	sw.	Benuett K. Matiack
Burlington	Burlington	12	§48	52.2	+0.2	80	24	30	13	38	3.04	−0.74	0.93	0	8	16	6	8	sw.	Public Service Power Co.
Camden	Camden	20	2	51.6	...	81	24	33	14†	39	3.09	...	1.09	0	10	13	8	9	nw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	49.6	...	79	24	29	13	37	3.51	−0.13	0.83	0	15	17	6	7	s.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Geo. W. Lobley.
Hightstown	Mercer	146	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	H. M. Barrett.
Indian Mills‡‡	Burlington	76	45	50.5	0.0	81	24	26	26	40	4.50	+0.70	2.12	0	12	13	10	7	sw.	James M. Armstrong.
Lakewood	Ocean	54	30	49.0	−0.5	77	21	28	13	40	3.98	+0.03	1.28	T.	14	14	4	12	w.	R. W. Holman.
Moorestown	Burlington	62	71	50.4	−0.1	78	24	32	28	35	4.07	+0.42	0.85	0	14	15	8	7	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	27	...	...	...	...	...	...	...	2.75	−0.57	0.70	0	11	...	...	...	...	William L. Flick.
Pemberton	Burlington	55	4	51.2	...	80	24	30	13	36	3.32	...	0.79	0	14	17	3	10	se.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	49.3	...	82	2	28	26	40	3.86	+0.44	0.78	...	11	21	2	7	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	...	...	...	...	...	...	...	3.29	...	0.92	0	11	19	6	5	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	48.8	...	81	24	22	5†	46	3.57	−0.39	0.75	...	10	17	9	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	50.2	+0.4	78	24	33	28	33	2.73	−0.21	0.78	T.	13	11	11	8	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	...	...	...	...	...	...	...	3.88	...	0.96	0	13	...	...	...	...	Edward H. Ristow.
Tuckerton	Ocean	23	41	47.2	−2.4	75	18	30	13†	27	1.74	−2.03	0.41	0	10	14	4	12	n.	John H. Brown.
Philadelphia, Pa.	...	114	63	53.2	+1.1	79	2	35	28	30	3.11	+0.06	1.03	0	10	12	9	9	s.	U. S. Weather Bureau.
Means and extremes	...	...	...	50.1	−0.5	82	2	22	5†	46	3.33	−0.40	2.12	T	12	16	6	8	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Alyce C. Conway.
Atlantic City	Atlantic	16	61	48.9	+1.1	66	2	34	28	22	2.30	−0.69	0.55	0	9	10	10	10	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	47.4	−0.8	77	2	30	13	36	3.42	−0.85	1.32	0	12	10	8	12	se.	William D. Martin.
Sandy Hook	Monmouth	22	36	47.7	−0.6	71	2	36	13	30	2.92	−0.70	0.83	T.	15	14	5	11	s.	U. S. Weather Bureau
Means and extremes	...	...	...	48.0	−0.1	77	2	30	13	36	2.88	−0.75	1.32	T.	12	11	8	11	s.	
For the State	...	...	...	49.4	−0.3	85	24	21	13	49	3.89	+0.28	2.55	T	13	15	6	9	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing: for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for April, 1934

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.50	...	...	.50	...	.10	.50	...	...	...	.50	.32	...	.12	...	.67	...	...	.76	.36	...	...	T.	...	.52	...	...	...	...	...	...	4.85
Charlotteburg	Passaic	1.00	...	...	.21	...	.09	.17	...	...	...	T.	1.50	.05	.14	.15	.38	.17	...	...	.27	...	...	...	...	.60	...	.04	.11	...	...	...	4.88
Culvers Lake	Delaware	.37	...	...	.29	...	.11	.25	...	...	...	.26	1.00	.02	.10	...	.50	...	...	.10	...	...	...	...	.30	.45	...	T.	...	...	...	...	3.75
Dover	Passaic	...	...	...	.35	...	.13	.34	...	...	...	.73	.24	*	.21	...	.65	...	...	.06	.27	...	...	.02	.45	.11	...	.05	...	...	...	...	3.61
Layton	Delaware	...	...	...	.42	...	.24	.21	...	...	...	.89	.64	.02	.11	.09	.50	T.	...	.15	.47	...	...	...	.84	.44	...	.04	...	...	...	...	5.06
Long Valley	Morris	.37	...	...	.52	...	.45	...	...	...	...	.45	.33	T	.21	...	.71	.06	...	.15	.12	...	...	T.	...	.26	...	.03	...	...	...	...	3.66
Newton	Delaware	.32	...	...	.26	...	.27	.09	...	...	...	.56	.40	...	.05	.04	.60	T.	...	.20	.30	...	...	...	...	1.13	...	.06	...	...	...	...	4.28
Phillipsburg	...do	.02	...	T.	.23	...	.07	.28	...	...	...	.78	.03	.03	.02	...	.76	...	...	.20	.21	...	T.	T.	.34	...	...	.02	...	...	...	...	2.99
Sussex	Hudson	.19	...	...	.11	...	.27	1.00	...	...	...	.01	.61	...	.09	...	.41	.12	...	.01	.22	...	...	...	...	2.08	...	.02	...	...	...	...	5.14
The Red Sandstone Plain.																																	
Boonton ‖	Passaic	.58	...	...	.11	T.	T.	.34	.08	...	...	...	1.28	...	.10	.16	T.	.74	...	...	.26	...	...	...	...	.32	...	...	.04	...	...	...	4.01
Canoe Brook ‖	Essex	1.64	...	...	.20	.06	T.	.32	.03	...	...	...	1.26	...	.09	.20	.09	.63	.04	...	.21	...	...	...	...	.52	...	T.	.13	...	...	...	5.42
Chatham ‖	...do	1.52	...	...	.24	.11	...	.34	.14	...	...	...	1.17	...	.09	.18	.02	.72	.05	...	.22	T	T.	T.	...	.40	...	...	.09	...	...	...	5.29
Elizabeth	Coast	1.00	...	...	.27	...	.05	.44	...	...	...	.06	1.09	.01	.15	.04	.65	.06	.05	T.	.20	...	...	.01	...	.35	...	T.	...	...	...	...	4.43
Flemington	Raritan	.58	...	...	.80	...	.06	.32	...	...	...	.13	.61	...	.15	...	.87	.03	...	.07	.31	...	...	T.	...	.46	...	.22	...	...	...	...	4.61
Jersey City	Coast	.70	...	...	.19	...	.03	.38	...	...	...	.47	.42	...	.18	...	.77	.02	...	.04	.17	...	...	.01	*	.35	...	.09	...	...	...	...	3.82
Lambertville	Delaware	.36	...	...	.22	...	.03	.45	...	...	...	.52	.21	T.	.05	.02	.83	.02	.02	.05	.29	...	...	.02	...	.57	...	.22	...	...	...	...	3.88
Little Falls. ‖	Passaic	2.55	...	...	.10	.07	.01	.43	.07	...	...	...	1.34	...	.03	.21	.05	.69	.01	...	.22	...	...	...	.01	.57	...	...	.06	...	...	...	6.42
New Brunswick	Raritan	.84	...	...	.18	T.	.02	.39	...	...	...	.13	.66	T.	.05	...	.61	.02	T.	.01	.25	T.	...	...	...	.36	...	.18	...	...	...	...	3.70
New Milford ‖	Hackensack	1.28	...	...	.03	.14	...	.37	.08	...	...	...	1.02	...	...	.55	...	.70	.03	...	.25	...	...	...	...	.35	...	...	.08	...	...	...	4.88
Paterson	Passaic	.87	...	...	.19	...	.05	.29	...	...	...	.19	.95	...	.11	.09	.04	T.	...	.09	.16	...	...	.15	...	.53	...	.05	...	...	...	...	3.76
Plainfield	Raritan	.56	...	...	.41	...	*	.40	...	...	...	*	.99	...	.20	...	.65	...	.05	*	.18	...	...	...	.58	...	...	.14	...	...	...	...	4.16
Ridgefield**	Hackensack	.43	...	T.	.18	...	.06	.53	...	...	...	*	1.12	...	.01	...	.80	.05	...	*	.23	...	...	.01	.32	...	...	.10	...	...	...	...	3.84
Somerville	Raritan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	......
Woodcliff Lake ‖	Hackensack	1.29	...	...	.05	.12	...	.41	.06	...	...	...	1.01	.02	...	.33	...	.74	...	...	.25	...	...	...	...	.58	...	...	.04	...	...	...	4.90
New York, N. Y***	Coast	.06	...	T.	.18	...	.03	.36	...	...	...	.74	.18	...	.18	...	.77	.03	...	.04	.16	...	...	.01	.27	.06	...	.09	...	...	...	...	3.16
The Southern Interior.																																	
Belleplain	Tuckahoe	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	......
Bridgeton	Delaware	...	...	...	.11	...	.24	.11	...	...	...	.52	...	...	...	.11	.84	.30	...	.21	...	...	...	...	.53	...	...	.20	...	...	...	...	3.17
Burlington	Delaware	...	...	...	.10	...	.35	...	...	...	...	.58	...	...	.15	...	.93	...	...	...	.29	...	...	...	.39	...	...	.25	...	...	...	...	3.04
Camden***	..do	T.	...	...	.16	...	.03	.43	...	...	...	.53	T.	T	.02	...	1.09	T.	...	.03	.28	...	T.	T.	.23	...	...	.29	...	...	...	...	3.09
Freehold	Raritan	.43	...	...	.12	...	.03	.42	...	...	...	.08	.54	.02	.04	...	.83	.02	.04	...	.24	...	...	.02	...	.41	...	.27	...	...	...	...	3.51
Hammonton	Mullica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.50	...	...	.25	...	...	...	...	§
Hightstown	Raritan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	......
Indian Mills	Mullica	.36	...	...	.18	...	.05	.40	...	...	...	.06	.42	...	.03	...	1.10	1.02	.20	T.	.20	...	...	...	...	.48	...	...	...	...	...	...	4.50
Lakewood	Metedeconk	.30	...	...	.10	...	.02	.42	...	...	...	.05	.57	.07	.19	.05	1.28	T.	.03	T.	.25	...	...	T.	...	.35	...	.30	...	...	...	...	3.98
Moorestown ‖	Delaware	.72	...	...	.08	.09	T.	.34	.11	...	...	...	.54	...	...	.02	.11	.85	.02	...	.39	...	...	...	...	.39	...	.01	.40	...	...	...	4.07
Northfield	Coast	.10	...	...	.10	...	T.	.33	...	...	...	.04	.70	...	...	...	.50	.01	.28	...	.26	...	...	...	...	.30	...	.13	...	...	...	...	2.75
Pemberton	Delaware	.12	...	...	.10	...	T.	.40	...	...	...	.07	.47	.05	.03	.02	.79	.02	.05	T.	.23	...	...	T.	...	.64	...	.33	...	...	...	...	3.32
Pleasantville ‖	Coast	.99	...	...	.14	.18	T.	.23	.03	...	...	...	.78	...	...	...	T.	.54	.28	...	.24	...	...	...	...	.32	...	...	.13	...	...	...	3.86
Port Norris	Maurice	.10	...	...	.13	...	...	.23	...	...	...	T.	.38	...	...	...	.92	.26	.15	.37	.28	...	...	...	...	.35	...	.12	T.	...	...	...	3.29
Runyon	Coast	.51	...	...	.17	...	...	.41	...	...	...	*	.75	...	.05	...	.75	...	...	...	.29	...	...	...	...	.47	...	.17	...	...	...	...	3.57
Trenton***	Delaware	.01	...	...	.10	...	.06	.31	...	...	...	.58	...	T.	.02	...	.78	.01	...	.01	.25	...	T.	.01	.41	...	...	.18	...	...	...	...	2.73
Trenton No. 2 ‖	...do	.96	...	...	.07	.02	T.	.23	.03	...	...	...	.70	...	T.	.05	.11	.73	T.	...	.29	...	...	.03	...	.46	...	...	.20	...	...	...	3.88
Tuckerton	Coast	...	...	...	.08	...	...	.23	...	...	...	.04	.41	...	...	...	.14	.41	...	...	.26	...	...	...	...	.11	...	.04	.02	...	...	...	1.74
Phila., Pa***	Delaware	T.	...	...	.19	...	.08	.34	...	...	...	.62	T.	T.	T.	...	1.03	.02	...	.02	.27	...	T.	T.	.27	...	T.	.27	...	...	...	...	3.11
The Sea Coast.																																	
Asbury Park	Coast	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.37	...	...	.01	.31	...	...	.28	T.	...	...	...	§
Atlantic City***	...do	...	...	...	.15	...	T.	.23	...	...	...	.55	...	...	T.	...	.30	.36	.06	T.	.29	...	...	T.	.26	...	...	.10	...	...	...	...	2.30
Long Branch**	...do	.01	...	...	.13	...	.01	.56	...	...	...	.50	.01	T.	.12	...	1.32	T.	T.	T.	.26	...	...	.01	.21	T.	...	.28	...	...	...	...	3.42
Sandy Hook***	...do	.01	...	...	.18	...	.03	.44	...	...	...	.40	.06	T.	.11	...	.83	.02	...	.02	.24	...	...	.01	.30	.03	...	.24	...	...	...	...	2.92

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.04	30.71	30	29.30	12	14.8	45	se.	16	81	72	78	61
Camden	...	...	...	...	...	8.8	27	s.	23	72	52	65	......
Long Branch	30.01	30.70	30	29.27	12	...	...	...	...	73	61	63	69
New York, N. Y	30.00	30.71	30	29.28	12	13.7	44	nw.	24	71	59	62	68
Philadelphia, Pa	30.03	30.71	30	29.38	12	11.8	33	n.	20	70	53	59	64
Ridgefield	30.00	30.72	30	29.28	12	...	...	...	...	...	...	...	......
Sandy Hook	30.00	30.70	30	29.28	12	12.9	35	s.	24	78	68	73	61
Trenton	80.01	30.70	30	29.33	12	9.9	29	w.	14	74	54	65	68

Daily Temperatures for April, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	66	77	72	68	61	56	59	75	...	70	50	45	52	56	62	58	71	77	65	66	55	61	67	80	69	62	56	55	62	67	....	63.4ᵃ
	Minimum	37	36	40	40	29	35	41	35	....	42	44	37	28	30	32	39	44	40	47	46	35	30	48	55	38	30	45	30	29	34	....	37.8ᵃ
Charlotteburg	Maximum	62	75	73	74	58	62	49	62	75	72	58	47	48	56	60	58	67	72	70	61	60	60	64	77	74	58	56	56	57	64	....	62.8
	Minimum	38	30	38	39	26	27	37	34	33	36	39	33	22	24	32	31	45	33	40	42	32	25	41	50	32	30	42	32	22	29	....	33.8
Dover	Maximum	64	76	71	56	59	49	52	62	74	61	49	44	45	50	59	53	70	72	64	63	55	58	66	76	59	59	54	53	57	65	....	59.8
	Minimum	39	33	39	36	26	31	38	33	35	43	38	33	26	27	32	36	45	38	44	37	34	28	44	52	38	30	37	31	27	32	....	35.4
Layton	Maximum	59	75	72	53	60	50	55	63	76	67	53	47	50	48	60	58	68	74	64	62	52	58	66	78	56	61	54	52	60	66	....	60.6
	Minimum	35	31	35	37	29	29	38	26	27	37	39	33	21	25	23	36	42	30	41	42	27	22	41	44	37	27	37	28	22	30	....	32.4
Long Valley	Maximum	61	73	70	60	55	45	54	58	72	63	52	45	49	50	59	56	68	71	65	62	55	58	65	75	61	58	49	53	57	64	....	59.4
	Minimum	39	32	39	39	30	36	38	32	31	50	39	35	24	25	28	33	45	35	42	44	32	26	47	50	37	27	42	29	25	29	....	35.3
Newton	Maximum	65	74	73	70	59	61	58	68	72	68	62	47	49	59	55	55	68	72	71	63	62	51	58	65	68	62	66	55	63	65	....	62.8
	Minimum	38	38	36	35	35	25	38	36	38	38	38	32	25	30	30	39	41	42	45	42	32	34	30	42	36	22	36	28	29	34	....	34.8
Phillipsburg	Maximum	62	76	69	53	59	50	57	64	72	66	50	48	51	55	62	55	69	74	67	65	57	59	67	78	60	62	56	57	63	67	....	61.7
	Minimum	39	36	42	37	30	37	39	35	36	43	42	37	29	32	33	40	45	40	45	44	36	32	48	52	39	32	38	33	30	35	....	37.9
Sussex	Maximum	57	75	75	61	64	52	57	67	77	72	62	48	52	52	62	61	70	79	76	63	53	59	69	79	72	61	56	52	65	67	....	63.8
	Minimum	38	32	39	37	27	33	38	31	34	40	38	34	26	28	31	37	44	37	44	44	33	28	46	53	39	31	43	32	26	33	....	35.9
The Red Sandstone Plain.																																	
Boonton§§	Maximum	63	77	69	47	57	43	53	60	71	64	54	46	49	49	58	54	70	74	64	64	56	57	68	85	60	58	62	52	56	64	....	60.1
	Minimum	35	34	40	42	27	28	35	38	32	44	37	36	27	26	34	33	43	39	42	45	33	29	40	49	41	32	39	32	26	29	....	35.6
Canoe Brook§§	Maximum	65	76	70	56	54	47	53	62	72	62	56	50	50	50	59	62	70	72	66	64	57	62	70	78	69	61	53	54	54	65	....	61.3
	Minimum	38	32	41	42	23	27	38	28	29	36	37	37	23	27	28	30	40	37	38	45	29	25	45	49	40	26	46	29	22	27	....	33.8
Elizabeth	Maximum	66	77	76	63	53	50	52	63	71	69	56	50	49	55	60	53	69	72	68	66	68	62	68	77	72	59	57	55	54	63	....	62.4
	Minimum	40	40	42	40	30	32	40	35	35	46	41	39	29	31	31	39	44	44	45	47	37	34	47	52	42	31	36	31	33	32	....	38.2
Flemington	Maximum	69	81	79	72	62	59	61	68	75	68	51	50	54	58	65	59	73	75	69	69	65	62	69	79	75	62	55	59	64	69	....	65.9
	Minimum	38	35	41	41	31	32	41	34	33	44	42	38	26	28	32	38	44	40	42	45	35	30	45	49	39	30	46	30	29	31	....	37.0
Jersey City	Maximum	65	77	68	55	55	44	50	63	70	63	54	48	50	50	58	57	72	72	56	65	58	57	62	69	52	59	53	54	51	59	....	58.9
	Minimum	12	48	43	42	34	36	41	40	41	46	41	37	34	38	36	42	50	51	50	46	39	39	48	46	40	36	37	34	40	39	....	41.2
Lambertville	Maximum	62	75	70	61	60	50	55	63	72	68	52	47	49	53	61	55	70	71	67	63	53	60	69	76	54	57	52	54	60	65	....	60.8
	Minimum	39	42	40	39	30	33	40	35	39	44	40	36	28	33	32	37	47	43	45	44	34	32	45	40	37	31	43	29	33	33	....	37.4
Little Falls§§	Maximum	69	78	73	52	56	45	54	64	74	65	55	49	49	55	61	58	73	73	66	66	57	62	70	80	68	61	55	61	56	66	....	62.4
	Minimum	38	36	42	43	28	31	39	34	34	45	38	37	29	29	34	34	45	41	44	46	38	31	46	54	41	32	44	32	29	32	....	37.5
New Brunswick	Maximum	63	76	72	65	52	49	53	61	69	67	49	48	48	53	59	59	71	71	67	63	59	58	69	78	70	58	55	54	54	64	....	61.1
	Minimum	10	40	42	39	31	31	40	36	34	43	40	38	30	30	33	38	47	43	44	46	36	32	47	53	41	30	46	31	33	32	....	38.2
Paterson	Maximum	66	77	72	57	57	46	50	64	74	66	55	47	49	50	61	54	72	75	63	65	59	58	68	80	64	61	54	55	57	65	....	61.4
	Minimum	42	38	43	40	30	33	40	38	39	46	39	37	31	30	35	49	44	41	47	38	33	48	41	51	41	33	45	33	31	36	....	39.0
Plainfield	Maximum	66	78	71	56	58	42	52	64	73	63	54	51	51	52	62	57	76	73	62	65	59	61	70	79	54	59	53	57	52	67	....	61.2
	Minimum	39	39	40	42	29	34	40	38	33	44	39	36	29	29	30	39	40	42	44	46	33	30	45	45	41	29	43	29	32	30	....	36.9
Ridgefield	Maximum	64	77	68	48	53	44	49	62	70	63	56	48	51	54	59	54	69	64	61	63	56	61	58	74	53	57	55	54	55	63	....	59.1
	Minimum	41	38	40	34	29	34	33	36	39	45	38	37	31	32	34	40	46	44	47	46	36	33	47	52	40	32	34	31	31	34	....	38.0
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	64	75	67	54	53	44	49	62	68	64	53	47	49	50	56	56	70	71	55	64	57	55	59	65	51	57	53	52	50	56	....	57.5
	Minimum	43	48	43	38	34	37	42	41	41	46	41	37	34	39	37	43	51	52	50	46	40	40	48	47	39	36	37	34	41	39	....	41.5
The Southern Interior.																																	
Belleplain	Maximum	....	81	68	57	56	56	....	....	68	68	56	52	....	....	....	62	68	64	66	66	....	....	78	79	66	59	62	62	55	60	....	62.7ᵇ
	Minimum	....	38	36	39	29	29	....	....	42	36	35	36	....	....	....	40	50	46	46	40	....	....	55	51	41	26	45	28	27	30	....	38.4ᵇ
Bridgeton	Maximum	66	79	69	58	55	54	55	69	70	71	56	48	53	60	62	57	65	69	65	65	55	70	68	79	51	60	58	54	58	65	....	62.1
	Minimum	43	45	40	31	36	43	38	37	42	38	37	32	36	35	41	48	44	47	44	36	33	49	52	40	31	41	30	34	35	39	....	39.2
Burlington	Maximum	64	77	74	68	60	60	57	65	70	74	63	64	53	56	63	63	69	75	72	64	65	62	71	80	77	59	57	54	58	64	....	65.3
	Minimum	41	39	44	41	34	34	42	39	35	42	42	39	30	32	32	33	48	43	41	46	39	32	49	52	40	34	47	32	35	33	....	39.0
Camden	Maximum	65	80	69	51	60	57	56	67	70	65	57	50	55	60	63	56	68	75	70	65	56	64	72	81	53	61	55	55	63	70	....	63.0
	Minimum	43	41	45	39	34	37	42	40	37	42	42	36	34	33	38	41	49	43	47	47	40	33	52	53	41	35	38	34	35	35	....	40 2
Freehold	Maximum	65	77	67	50	51	47	52	68	71	62	60	48	47	54	60	56	70	70	66	64	59	59	69	79	63	60	54	53	52	60	....	60.4
	Minimum	41	40	40	38	31	31	40	35	37	41	38	38	29	32	32	48	49	44	45	46	36	32	46	52	42	32	45	31	34	32	....	38.8
Hammonton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	62	72	79	53	59	58	55	60	64	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	33	50	41	31	45	31	34	35	37	....	......
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	66	80	73	60	60	55	54	65	72	67	57	52	52	60	66	60	63	74	70	64	65	64	72	81	66	61	58	54	62	65	....	63.9
	Minimum	42	40	43	40	30	27	42	35	32	37	38	38	28	30	30	39	50	41	43	45	34	28	47	50	41	26	46	30	30	31	....	37.1
Lakewood	Maximum	64	77	70	52	49	48	52	60	71	62	52	49	47	54	56	58	67	70	63	64	60	57	69	77	62	62	56	55	51	58	....	59.7
	Minimum	43	37	42	39	31	32	42	34	33	39	40	38	28	31	34	40	50	44	45	46	37	31	47	53	43	31	45	32	30	29	....	38.2
Moorestown	Maximum	63	77	69	51	60	55	54	63	70	64	56	50	52	58	62	57	68	73	69	63	56	61	70	78	50	59	54	53	59	65	....	61.3
	Minimum	39	42	44	39	34	34	42	39	41	42	41	36	33	34	35	40	49	45	46	45	38	33	51	50	38	33	39	32	35	34	....	39.4
Pemberton	Maximum	64	78	75	55	58	53	54	63	71	68	57	49	49	57	65	60	69	72	70	66	60	63	71	80	66	60	55	55	61	67	....	63.0
	Minimum	39	43	43	40	31	34	43	37	35	41	40	39	30	33	34	41	50	45	44	46	44	32	48	53	42	32	47	31	34	34	....	39.5
Pleasantville§§	Maximum	67	82	61	54	49	51	55	62	63	57	52	53	53	58	56	57	66	67	60	65	59	58	60	65	58	59	64	56	56	56	....	59.3
	Minimum	39	42	44	42	30	35	41	33	37	38	40	39	29	32	32	43	50	49	47	46	35	51	43	50	43	28	47	29	29	35	....	39.3
Runyon	Maximum	65	78	74	44	51	55	54	68	72	62	56	58	50	54	64	64	70	74	68	64	64	74	76	81	60	60	60	61	56	64	....	63.4
	Minimum	50	32	35	39	22	25	40	34	35	42	38	36	22	32	29	30	35	36	40	35	28	46	41	46	40	26	42	25	23	25	....	34.3
Trenton	Maximum	62	76	68	48	57	51	55	63	70	60	54	49	50	56	61	56	70	72	69	63	54	60	68	78	50	58	53	54	59	64	....	60.3
	Minimum	41	43	44	39	33	36	41	41	39	43	41	36	34	35	36	40	49	47	47	45	39	38	48	50	40	34	38	33	36	36	....	40.1
Tuckerton	Maximum	59	70	55	50	47	48	55	55	50	51	50	52	48	45	46	45	64	75	65	62	52	54	55	55	58	55	55	50	55	56	....	54.6
	Minimum	42	46	40	38	36	38	40	40	41	46	42	40	30	34	34	39	42	48	46	46	39	42	42	41	39	38	36	30	38	40	....	39.8
Philadelphia, Pa	Maximum	63	79	69	53	58	56	58	65	69	67	56	49	51	57	61	58	69	75	68	64	55	62	69	78	54	58	55	54	61	66	....	61.9
	Minimum	44	49	49	43	40	40	45	46	46	45	45	40	39	41	41	46	52	52	53	48	42	43	51	54	43	39	41	35	42	42	....	44.5
The Sea Coast.																																	
Asbury Park	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Atlantic City	Maximum	58	66	60	48	46	48	54	60	57	51	50	51	51	54	52	56	64	62	55	63	59	53	56	58	56	55	57	53	49	52	....	55.1
	Minimum	43	44	44	40	36	39	45	42	43	43	42	40	41	43	38	46	49	49	49	47	41	40	50	50	40	38	40	34	41	44	....	42.7
Long Branch	Maximum	64	77	62	48	46	44	51	60	66	51	48	49	48	50	50	55	63	68	55	63	56	53	62	62	55	62	52	52	49	53	....	55.8
	Minimum	43	41	46	37	33	32	39	37	36	42	39	36	30	34	34	42	48	47	49	47	38	35	48	50	39	31	37	31	35	32	....	38.9
Sandy Hook	Maximum	59	71	63	46	45	42	48	59	67	50	46	47	47	49	52	53	65	67	52	60	55	52	58	62	54	58	53	53	47	52	....	54.4
	Minimum	40	41	44	38	36	36	40	40	40	42	39	39	36	38	40	42	46	45	47	46	42	42	47	50	42	38	39	36	40	40	....	41.0

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Pleasantville**	Evaporation	.224	.240	.252	.068	.096	.070	*	.158	.144	.160	.156	.080	.112	.192	*	.188	.056	.192	.048	.176	.064	.320	.192	.240	.144	.160	.066	.160	.192	.096	....	4.246
	Wind movement	74	108	46	52	48	40	54	37	75	40	54	90	55	64	61	130	14	31	34	62	56	41	142	124	136	63	103	39	60	39	....	1972
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Wind movement	49	44	31	34	35	47	20	31	35	67	100	51	36	38	27	43	29	27	32	27	76	43	66	59	76	64	62	56	48	45	....	1397

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

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NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. MAY, 1934. No. 5.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The weather during the month was without any unusual happenings, except for the dust storm on the 11th. This storm crossed the State from about 10 a. m. to 5 p. m., covering the entire State with the exception of the extreme southern portion. The temperature average for the month was above the normal as was also the total rainfall. Only one marked cool period was noted, that from about the 24th to 29th, inclusive, but the lowest temperatures for the month were not recorded during that period; they occurred mostly on the 1st and 13th and were in the high twenties and low thirties. The highest were up in the low nineties, except near the Coast, and were recorded quite generally on the 6th, 7th, or 21st. Some light to heavy frosts were recorded in the northern half of the State on the 1st and 13th with only a few reports of killing frosts.

The rain came at fairly well-timed intervals and was sufficient in amount to keep the soil well moistened. Amounts of from one and one-half to two inches were general during the period from the 2d to 4th, inclusive. A dry period then prevailed until the 15th, except for light to moderate showers on the 10th. On the 15th an average of over one-half inch occurred. The last decade witnessed almost daily showers of light to moderate amounts. The average for the State for the month was about 124% of the normal, the greatest amounts being over the Red Sandstone Plain and the least over the Sea Coast section.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 37 stations, was 62.3°, which was 1.9° above normal. The highest temperature was 98° at Camden on the 21st, and the lowest, 28°, at Canoe Brook, Layton and Runyon on the 13th. The greatest daily range of temperature was 53° at Charlotteburg on the 13th. The highest monthly temperature was 65.6° at Burlington, and the lowest, 58.7° at Tuckerton.

The temperature departure from the normal for the year 1934, to date, by sections, is: The Highlands, —0.8°; Red Sandstone Plain, —1.6°; Southern Interior, —2.0°; Sea Coast, —1.9°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 44 stations, was 4.63 inches, which was 0.90 inch above normal. The greatest monthly precipitation was 6.51 inches, at Little Falls, and the least, 2.88 inches at Burlington.. The greatest amount of precipitation in any 24 consecutive hours was 2.15 inches at Northfield on the 15th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 11, or the normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, —0.25 inch; Red Sandstone Plain, +0.40 inch; Southern Interior, —0.85 inch; Sea Coast, —1.48 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 12 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 41 miles per hour from the northeast at Atlantic City on the 26th.

MISCELLANEOUS.

The per cent of possible sunshine was 64, or 4 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.00 inches, or 0.01 inch above normal. The highest reading was 30.59 inches at Trenton on the 1st, and the lowest 29.60 inches at Sandy Hook on the 7th.

The mean stage of the Delaware River at Phillipsburg was 3.6 feet, and the highest 4.7 feet on the 5th. At Trenton the mean stage was 2.2 feet, and the highest 3.0 feet on the 6th.

Dense fog occurred on the following dates: 1, 2, 3, 4, 5, 15, 16, 19, 20, 21, 22, 29, 30 and 31. Thunderstorms were observed on the following dates: 3, 4, 10, 11, 15, 19, 20, 21, 22, 23, 24 and 31. Light to heavy frosts were recorded in the northern half of the State on the 1st and 13th with only a few reports of killing frost.

COMPARATIVE DATA FOR MAY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885........	57.3	−3.1	90	29	2.74	−0.99	5.20	1.18	0	....	....	....	....
1886........	58.8	−1.6	87	36	6.07	+2.34	8.46	4.15	0	....	....	....	....
1887........	63.3	+2.9	94	35	1.37	−2.36	3.82	**0.08**	0	6	....	....	....
1888........	58.6	−1.8	90	26	4.92	+1.19	6.48	3.00	0	16	....	....	....
1889........	62.3	+1.9	94	32	4.09	+0.36	6.60	2.43	0	12	....	....	...
1890........	60.7	+0.3	87	33	4.24	+0.51	7.17	2.60	0	12	....	....	....
1891........	59.5	−0.9	93	28	2.97	−0.76	5.39	1.78	0	9	9	11	11
1892........	60.1	−0.3	90	30	5.04	+1.31	6.52	3.26	0	13	8	13	10
1893........	59.4	−1.0	95	29	4.07	+0.34	6.38	2.55	0	10	13	8	10
1894........	61.4	+1.0	93	30	**7.72**	+3.99	**15.61**	3.57	0	13	11	9	11
1895........	60.9	+0.5	**102**	28	2.85	−0.88	3.95	1.66	0	8	12	12	7
1896........	**65.3**	+4.9	98	29	3.21	−0.52	4.54	1.62	0	10	10	12	9
1897........	60.6	+0.2	87	29	5.68	+1.95	9.11	1.71	0	12	11	12	8
1898........	58.5	−1.9	93	29	7.00	+3.27	9.26	3.92	0	18	8	8	15
1899........	61.1	+0.7	94	29	1.92	−1.81	3.15	1.15	0	9	12	12	7
1900........	60.9	+0.5	98	26	4.71	+0.98	7.33	2.53	0	10	13	7	11
1901........	58.6	−1.8	90	29	5.60	+1.87	8.13	3.10	0	16	9	9	13
1902........	60.3	−0.1	95	29	2.04	−1.69	4.63	1.11	0	7	15	11	5
1903........	62.7	+2.3	98	**21**	**0.59**	−3.14	**1.32**	**0.08**	0	4	16	10	5
1904........	62.8	+2.4	97	31	2.60	−1.13	6.69	1.01	0	8	17	9	5
1905........	61.4	+1.0	89	22	1.71	−2.02	3.94	0.42	0	8	12	11	8
1906........	61.0	+0.6	94	24	4.21	+0.48	6.28	2.37	0	10	16	8	7
1907........	55.4	−5.0	91	22	5.05	+1.32	8.09	2.51	0	12	12	9	10
1908........	61.6	+1.2	95	29	7.10	+3.37	9.99	4.39	0	13	9	10	12
1909	60.0	−0.4	91	27	2.30	−1.43	4.84	0.79	0	9	10	11	10
1910..	60.0	−0.4	94	27	2.54	−1.19	4.25	1.48	0	12	10	10	11
1911........	64.5	+4.1	99	22	1.37	−2.36	3.84	0.31	0	7	14	11	6
1912........	62.0	+1.6	92	31	4.09	+0.36	6.47	2.79	0	11	11	11	9
1913........	60.3	−0.1	94	25	3.45	−0.28	4.86	2.53	0	9	15	7	9
1914........	63.1	+2.7	98	30	2.93	−0.80	5.09	0.95	0	10	14	9	7
1915........	58.1	−2.3	88	30	3.82	+0.09	6.15	2.00	0	13	13	7	11
1916........	61.1	+0.7	90	33	3.48	−0.25	5.27	2.14	0	12	12	11	8
1917........	**54.0**	−6.4	90	25	3.83	+0.10	6.83	2.08	0	11	10	10	11
1918........	64.6	+4.2	93	31	4.94	+1.21	7.59	2.74	0	12	14	10	7
1919........	60.9	+0.5	95	31	4.98	+1.25	7.68	3.06	0	12	14	6	11
1920........	57.4	−0.3	89	26	3.00	−0.73	5.23	1.61	0	10	15	8	8
1921........	60.2	−0.2	96	32	4.17	+0.44	6.44	2.60	0	10	14	7	10
1922........	63.0	+2.6	90	23	3.84	+0.11	7.55	1 16	0	8	18	6	7
1923........	59.1	−1.3	90	25	1.66	−2.07	3.62	0.67	0	6	20	6	5
1924........	56.8	−3.6	87	25	5.69	+1.96	7.94	3.36	0	17	12	7	12
1925........	57.7	−2.7	99	23	2.86	−0.87	4.94	0.49	0	8	13	11	7
1926........	59.1	−1.3	90	26	2.58	−1.15	4.52	1.08	0	9	18	9	4
1927........	58.1	−2.3	88	30	3.65	−0.08	8.16	1.93	0	13	9	10	12
1928........	58.0	−2.4	93	27	2.23	−1.50	3.49	1.26	0	12	12	9	10
1929........	59.9	−0.5	95	26	3.49	−0.24	5.58	1.26	0	13	13	8	10
1930........	62.7	+2.3	98	31	2.75	−0.98	4.50	1.54	0	9	17	7	7
1931........	60.4	0.0	97	**21**	3.73	0.00	2.20	0.77	0	12	14	6	11
1932........	60.5	+0.1	94	29	2.98	−0.75	5.61	1.60	0	8	16	8	7
1933........	63.2	+2.8	93	32	4.84	+1.11	6.98	2.56	0	13	11	8	12
1934........	62.3	+1.9	98	28	4.63	+0.90	6.51	2.88	0	11	17	6	8
Period.....	60.4	....	102	21	3.73	....	15.61	0.08	0	11	13	9	9

W. B. O. Philadelphia-6-29-34-875.

Climatological Data for May, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	63.8	+3.4	96	21	35	13	40	4.34	+0.80	0.98	0	8	23	3	5	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	61.4	+4.2	93	6†	30	1	53	5.20	+1.32	1.06	0	11	22	3	6	sw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	.....	....	......	......	35	1	....	3.77	−0.06	0.82	0	12	23	2	6	e.	Brice E. Riker.
Dover	Morris	600	50	60.9	+2.5	92	21	33	1†	38	6.10	+2.47	1.54	0	12	4	20	7	......	William C. Harris
Layton	Sussex	480	33	59.8	+2.3	93	21	28	13	44	3.95	+0.81	1.11	0	10	16	8	7	s.	A. M. Depue.
Long Valley	Morris	520	4	60.8	....	90	21†	30	13	40	4.13	....	1.03	0	8	15	10	6	s.	S. N. Dilts.
Newton	Sussex	769	51	61.6	+2.2	90	21	36	12†	34	4.23	+0.62	0.95	0	10	15	8	8	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	63.3	+2.3	95	21	35	13	39	4.06	+0.75	1.04	0	9	17	8	6	......	Town Engineer.
Sussex	Sussex	442	39	63.6	+4.3	96	21	33	13	43	4.40	+0.97	1.41	0	9	15	8	8	......	A. J. W. Mowatt
Means and extremes	......	......	....	61.7	+3.0	96	21	28	13	53	4.46	+0.96	1.54	0	10	17	8	6	s.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	60.6	+2.3	90	7†	33	1†	41	4.76	+1.06	1.05	......	12	18	2	11	nw.	John Kline.
Canoe Brook	Essex	173	4	60.6	....	92	21	28	13	43	5.42	....	1.13	......	11	20	6	5	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30	.....	....	......	......	......	......	....	5.06	+1.14	1.11	......	13	22	1	8	......	Paul Molitor, Sr.
Elizabeth	Union	45	55	62.6	+0.9	91	31	37	1†	35	4.95	+1.31	2.10	0	13	22	2	7	sw.	Union County Park Comm.
Flemington	Hunterdon	140	§48	63.4	+2.4	94	21	34	13	40	4.40	+0.88	1.34	0	10	22	3	6	s.	Hiram E. Deats.
Jersey City	Hudson	10	36	63.8	+2.5	92	21	43	1	37	4.01	+0.56	1.29	0	12	12	11	8	n.	S. K. Pearson.
Lambertville	Hunterdon	430	47	62.2	+1.2	91	21	37	12	40	4.60	+0.94	1.16	0	10	21	4	6	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	62.5	+2.7	94	21	34	1	40	6.51	+2.57	1.23	0	14	18	6	7	nw.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	81	62.8	+2.4	92	21	36	1	37	4.07	+0.41	1.43	0	11	19	6	6	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	.....	....	......	......	......	......	....	5.34	+1.83	1.12	......	11	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	63.8	+2.3	93	21	38	1†	38	5.91	+2.14	1.25	0	11	17	7	7	w.	William H. Meyer.
Plainfield	Union	120	46	62.3	+2.5	94	21	35	1†	43	3.63	−0.10	0.90	0	12	9	12	10	sw.	S. K. Pearson.
Ridgefield	Bergen	80	17	62.0	+2.9	93	21.	37	13	35	5.57	+2.10	1.63	0	12	17	7	7	se.	George P. Kirsten.
Somerville	Somerset	70	51	.....	....	......	......	......	......	....	......	....	......	......	...	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	.....	....	......	......	......	......	....	5.29	+1.95	1.09	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y.	....	365	64	62.6	+2.0	88	21	43	1	33	4.05	+0.81	1.39	0	14	9	14	8	sw.	U. S. Weather Bureau
Means and extremes	......	......	....	62.4	+2.2	94	21	28	13	43	4.97	+1.29	2.10	0	12	18	6	7	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	62.8ª	+2.2	94	21	32	13	46	5.20	+1.68	1.25	......	10	18	4	9	se.	A. F. Waldron.
Bridgeton	Cumberland	30	51	63.0	−0.5	94	31	39	12	41	4.87	+1.60	1.13	0	10	23	1	7	ne.	Bennett K. Matlack
Burlington	Burlington	12	§48	65.6	+2.7	95	7†	36	13	41	2.88	−0.63	0.97	0	8	18	7	6	sw.	Public Service Power Co.
Camden	Camden	20	2	65.1	....	98	21	38	13	42	3.35	....	1.15	0	10	12	10	9	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	62.8	....	94	21	36	13	46	4.89	+1.11	1.60	0	12	22	2	7	w.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	63.4	....	95	21	41	16	47	4.76	+1.15	1.20	0	11	14	11	6	ne.	Geo. W. Lobley.
Hightstown	Mercer	146	41	.....	....	......	......	......	......	....	......	....	......	......	....	....	....	....	......	H. M. Barrett.
Indian Mills‡‡	Burlington	76	45	63.7	+2.0	97	21	33	13	42	4.12	+0.78	1.00	0	11	15	8	8	ne.	James M. Armstrong.
Lakewood	Ocean	54	30	62.5	+2.5	90	22	34	1†	36	4.12	+0.34	1.60	0	13	16	5	10	ne.	R. W. Holman.
Moorestown	Burlington	62	71	62.6	+1.4	93	21	37	13	38	4.30	+0.78	0.92	0	10	15	7	9	sw.	Japanese Beetle Laboratory.
Northfield‡‡	Atlantic	25	27	.....	....	......	......	......	......	....	5.56	+2.32	2.15	0	11	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	64.6	....	96	21	35	13	44	3.82	....	1.46	0	10	19	2	10	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	61.8	....	97	21	32	13	43	5.39	+2.21	1.36	......	12	18	4	9	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	.....	....	......	......	......	......	....	5.36	....	1.40	0	7	21	3	7	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	63.7	....	96	21	28	13	46	4.47	+0.57	1.20	......	9	20	4	7	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	63.2	+2.1	94	21	41	1	37	4.79	+1.71	1.33	0	12	6	14	11	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	.....	....	......	......	......	......	....	4.95	....	1.51	0	10	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	41	58.7ª	−1.1	86	18†	39	2	34	4.39	+0.95	1.28	0	14	17	7	7	ne.	John H. Brown.
Philadelphia, Pa	....	114	63	66.1	+3.2	95	21	47	1	37	3.92	+0.66	1.46	0	10	10	12	9	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	63.1	+1.4	98	21	28	13	47	4.54	+1.12	2.15	0	11	17	6	8	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	59.6	+1.1	89	6	39	1	36	4.57	+1.31	1.33	0	12	6	15	10	s.	S. W. Triano.
Atlantic City	Atlantic	16	61	59.6	+1.5	89	7	46	13	34	4.88	+1.83	1.47	0	14	10	6	15	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	60.0	+2.0	89	6	35	1	38	3.98	+0.13	1.35	0	13	11	12	8	s.	William D. Martin.
Sandy Hook	Monmouth	22	36	60.2	+1.8	84	22	42	1	31	3.56	−0.16	1.09	0	14	11	10	10	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	59.8	+1.6	89	6†	35	1	38	4.25	+0.78	1.47	0	13	9	11	11	s.	
For the State	......	......	....	62.3	+1.9	98	21	28	13	53	4.63	+0.90	2.15	0	11	17	6	8	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ª, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for May, 1934

Stations	Drainage Basin	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware			.98	.19							.89			T.	.86						.22		.20	T.	.95					.05		4.34
Charlotteburg	Passaic		1.06		.34					T.	.04	.70				.80	.09				.07			.93		1.04	.02				.11		5.20
Culvers Lake	Delaware			.70	.15	.05					.48	.10				.69	.03					.05	.30		T.	.82	.02			.38			3.77
Dover	Passaic		*	1.50	.02						.68					.80					.56	.14	.50		*	1.54	.06			.30			6.10
Layton	Delaware			.77	.08	.12					1.09	.02				.50							.47	.05		.83	.02				T.		3.95
Long Valley	Morris		1.03	.26								.40				.64						.33			.63	.77	.07						4.13
Newton	Delaware			.90	.01						.95	.06				.83	T.					.01	.24	.27		.92	.04						4.23
Phillipsburg	...do		.02	1.04	.07					T.	.50				T.	.82						.03	.61		.05	.92	T.			T.	T.		4.06
Sussex	Hudson			.29	.71							1.41				.74					.01		.56	.07		.54	.07						4.40
The Red Sandstone Plain.																																	
Boonton ‖	Passaic			.48	.80							.44			T.	.32	.30				.12	.13	.02	.67		.32	1.05	T.			.11		4.76
Canoe Brook ‖	Essex			.71	.93							.35			T.	.36	.26				.11	.08	T.	1.13		.19	1.18	T.			.12		5.42
Chatham ‖	...do			.54	.99	T.						.31				.26	.34				.10	.08	.03	1.02		.19	1.11	.01			.08		5.06
Elizabeth	Coast		.01	2.10	.21							.25			T.	.40	.06				.13	.27	.05	.71		.65	.03			T.	.08		4.95
Flemington	Raritan			1.16	.26							.18			T.	.62	.04				T.	.02	T.	.65	T.	1.34	.02			T.	.11		4.40
Jersey City	Coast		.12	1.29	.13						.13				T.	.35	.01				.19	.01	1.00		T.	.65	.05			.08			4.01
Lambertville	Delaware		T.	1.16	.58									.11	.48	.07				T.			.78	.38	T.	.98	.02			T.	.04		4.60
Little Falls ‖	Passaic			.78	.93	.01					.01	1.22			.01	.37	.29				.30	.01		1.19		.27	.84	T.			.28		6.51
New Brunswick	Raritan		T.	1.43	.80							.05			T.	.40	.09					.03	.05	.36		.80	.03				.03		4.07
New Milford ‖	Hackensack			.72	1.12							.47				.28	.27				.15			1.03		.19	.62	.03			.46		5.34
Paterson	Passaic			1.13	.40							1.00			.01	.55	.05			.27				1.25		.86	.11				.28		5.91
Plainfield	Raritan		.12	.90	.37						.16				.01	.40					.12	.10	.78		T.	.62	.01			.04			3.63
Ridgefield**	Hackensack		*	1.63	.26					T.	.01	.50			.02	.58		T.		*	.32	T.	1.17		T.	.27	.64			.17			5.57
Somerville	Raritan																																
Woodcliff Lake ‖	Hackensack			.84	1.09							.67				.45	.26				.13			.69		.23	.61				.32		5.29
New York, N. Y***	Coast		.41	1.10	.10						.13				.02	.32				.08	.13	.01	1.03		.01	.59	.05			.07			4.05
The Southern Interior.																																	
Belleplain	Tuckahoe		.47	1.05	.25						.42				1.25	.30							.55			.63	.14			.14			5.20
Bridgeton	Delaware		1.13	.89	.23						.48				T	.84			.05				.33		.54	.35	T		.03	T.			4.87
Burlington	Delaware		.11	.37	.89						.05	T			.10	T.							.27	T.		.97				.12	T.		2.88
Camden***	..do		.20	1.02	.39					T.	.05	T	T.		T.	.50						T	.39		.20	.54	.01	T.		.05	T.		3.35
Freehold	Raritan		.06	1.60	.88							.03			T.	.47	.18						.02	.96		.56	.06			.06	T.	.01	4.89
Hammonton	Mullica		1.20	.50	.02						.40					.80			.05			.01	.70		.55	.47				.06			4.76
Hightstown	Raritan																																
Indian Mills	Mullica		.12	1.00	.20						T.	.37			.03	.60	.15					T.	.46	.18		.97	T.			.04			4.12
Lakewood	Metedeconk		.10	1.60	.32							.22			T.	.40	.18						.04	.40		.62	.06	.04		.05	.09		4.12
Moorestown ‖	Delaware			.92	.70	.43						.34				T.	.50							.38		.44	.50	.04			.05		4.30
Northfield	Coast		.30	1.08	.11							.25	T.			2.15	.15							.57		.65	.17			.12	.01		5.56
Pemberton	Delaware		.06	1.46	.27							.17			T.	.53	.19			T.			T.	.50		.57	.05			T.	.02		3.82
Pleasantville ‖	Coast			1.28	.39	.02						.24				.39	1.36				T.			.50		.25	.65	.18		.05	.08		5.39
Port Norris	Maurice		.20	1.40	.48							.41				1.10	T.							.88		.89	T.			T.			5.36
Runyon	Coast			1.17	.81							.02				.31	.13							1.20		.68	.10				.05		4.47
Trenton***	Delaware		.37	.99	1.03	T.				T.	.01	T.			.02	.41	.01		T.	T.			1.25		.04	.62	.02	T.		.02	T.		4.79
Trenton No. 2 ‖	...do			.81	.92	.59					T.	.01	T.		T	.05	.42							1.38		.36	.39	T.			.02		4.95
Tuckerton	Coast		.12	1.28	.38							.22	.11		.26	.35	.26							.34		.51	.32	.06		.11	.07		4.39
Phila., Pa***	Delaware		.24	1.34	.62					T.	.03	T.			T.	.51				T.		.01	.32		.24	.49	T.			.12			3.92
The Sea Coast.																																	
Asbury Park	Coast		.50	1.33	.25						.19				.13	.53				T.	T.		.88			.39	.24	.01		.09	.03		4.57
Atlantic City***	...do		.90	.68	.15						.25	T.			.51	1.02					.02		.50	.01		.72	.01	.01		.09	.01		4.88
Long Branch**	...do		.46	1.35	.10						.09	T			.04	.48				.01	.03		.75			.34	.26			.06	.01		3.98
Sandy Hook***	...do		.37	.77	.05					T.	.01				.03	.48	.01			.01	.13	.08	.84		T.	.48	.15			.15			3.56

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level) Monthly mean	Highest	Date	Lowest	Date	Wind Average hourly velocity	Maximum velocity	Direction	Date	Relative humidity 8 a. m.	12 noon	8 p. m.	Percentage of sunshine
Atlantic City	30.02	30.55	1	29.65	7	16.5	41	ne.	26	81	72	78	62
Camden						9.0	25	sw.	10	68	49	61	
Long Branch	30.00	30.56	1	29.66	22					69	54	57	66
New York, N. Y	29.99	30.57	1	29.66	22	12.3	46	w.	21	69	52	58	68
Philadelphia, Pa	30.01	30.57	1	29.66	7	12.6	39	sw.	10	62	45	55	60
Ridgefield	29.99	30.56	1	29.65	22								
Sandy Hook	29.99	30.57	1	29.60	7	11.9	35	w.	22	73	58	71	59
Trenton	29.99	30.59	1	29.63	7	9.5	37	s.	10	66	48	60	69

Daily Temperatures for May, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	75	74	58	81	88	89	84	72	77	88	72	65	72	72	66	68	73	81	79	90	96	89	78	71	63	60	76	83	78	86	88	77.5
	Minimum	37	43	55	60	56	60	64	43	40	54	60	39	35	55	57	42	40	50	46	53	58	56	52	41	50	48	48	43	48	63	58	50.1
Charlotteburg	Maximum	71	72	66	74	81	93	86	76	71	83	81	82	87	72	69	66	76	76	76	80	93	91	91	71	74	58	71	81	79	91	83	78.1
	Minimum	30	34	54	57	50	62	67	37	32	50	50	36	34	53	39	44	36	39	37	45	50	52	43	35	49	46	45	38	46	42	52	44.6
Dover	Maximum	71	70	62	74	87	87	80	68	71	82	70	62	68	69	60	68	69	79	75	83	92	86	76	74	60	57	69	78	71	82	85	73.7
	Minimum	33	39	52	57	54	62	55	40	37	53	56	38	33	54	55	41	41	49	43	49	57	56	49	40	49	47	48	43	45	59	58	48.1
Layton	Maximum	74	72	65	80	87	88	78	65	72	79	68	61	69	70	64	67	70	76	77	89	93	86	68	70	55	65	72	80	80	83	81	74.3
	Minimum	30	36	54	60	53	65	55	34	31	54	41	32	28	54	50	39	35	52	35	45	52	55	45	35	48	48	36	40	44	62	55	45.3
Long Valley	Maximum	71	67	76	80	84	86	80	68	71	84	77	60	68	69	66	67	68	77	75	81	90	90	80	69	72	57	69	78	72	82	83	74.7
	Minimum	31	54	57	52	51	62	61	36	35	50	59	37	30	50	55	41	39	48	41	41	53	53	51	50	37	45	45	39	42	58	53	47.0
Newton	Maximum	72	76	68	78	85	87	81	66	72	85	71	61	69	70	63	65	68	65	78	85	90	86	68	70	55	69	71	78	77	83	84	74.1
	Minimum	38	45	53	58	53	63	60	39	39	52	57	36	36	53	52	38	43	42	54	60	60	53	47	42	46	43	45	47	48	60	58	49.0
Phillipsburg	Maximum	74	72	66	78	88	90	85	71	75	86	73	66	72	73	63	68	71	81	78	91	95	89	74	75	60	59	72	79	72	85	85	76.3
	Minimum	38	41	56	60	55	61	65	43	40	54	61	40	35	55	55	43	44	47	47	52	57	58	53	42	51	49	48	44	48	60	57	50.3
Sussex	Maximum	78	78	67	83	88	90	83	71	77	87	82	67	71	72	68	69	73	75	80	91	96	92	77	71	61	59	75	85	85	88	88	78.3
	Miuimum	35	41	55	48	57	58	63	39	37	53	59	37	33	35	40	51	40	49	40	51	56	58	48	52	54	50	52	50	50	66	61	49.0
The Red Sandstone Plain.																																	
Boonton§§	Maximum	71	70	64	76	87	85	90	75	71	89	71	65	68	71	60	67	68	77	74	83	90	89	70	70	53	58	72	78	74	81	81	74.1
	Minimum	33	38	49	57	53	57	67	40	38	48	56	37	33	41	57	44	40	43	40	47	52	55	51	39	50	48	49	41	44	57	53	47.0
Canoe Brook§§	Maximum	71	68	64	77	87	88	81	78	72	84	72	69	69	72	60	69	72	79	75	80	92	87	79	74	67	65	71	76	73	83	84	75.4
	Minimum	30	35	54	55	50	55	65	35	32	53	60	36	28	52	56	42	39	42	36	46	53	53	50	36	50	48	43	39	39	57	54	45.9
Elizabeth	Maximum	67	67	61	70	88	89	82	73	70	82	79	66	65	72	67	67	66	78	73	81	89	89	77	74	66	57	72	80	75	86	91	74.8
	Minimum	37	43	55	55	53	62	65	44	40	55	61	42	37	53	57	45	45	46	47	51	55	59	53	41	51	50	53	46	47	57	59	50.5
Flemington	Maximum	74	70	69	79	91	92	86	73	77	85	82	67	72	73	69	73	71	80	79	90	94	88	76	77	70	59	69	77	71	84	85	77.5
	Minimum	35	40	55	47	55	61	68	39	39	52	61	39	34	53	57	44	44	46	49	50	55	57	52	42	49	48	50	45	47	60	56	49.3
Jersey City	Maximum	65	67	64	70	89	90	84	70	73	86	74	64	66	72	61	70	70	81	76	77	92	90	73	75	60	59	71	76	75	83	85	74.5
	Minimum	43	50	54	53	52	65	54	47	50	54	54	46	49	56	55	45	51	51	54	53	59	63	54	53	51	49	53	54	55	56	62	53.1
Lambertville	Maximum	69	68	69	71	85	88	82	75	73	82	72	70	71	66	66	67	68	78	75	88	91	86	70	73	55	58	67	73	69	81	81	73.8
	Minimum	38	44	54	55	56	65	65	43	43	53	54	37	54	54	43	44	46	47	51	51	51	62	50	46	48	48	49	47	49	60	59	50.5
Little Falls§§	Maximum	73	69	63	75	89	90	83	80	74	86	73	70	70	72	61	70	70	80	78	81	94	90	76	75	63	63	75	79	74	85	85	75.3
	Minimum	34	40	55	51	53	59	60	40	38	54	57	40	35	54	57	43	43	46	42	49	54	57	51	41	51	48	50	44	45	59	59	48.7
New Brunswick	Maximum	69	67	66	69	86	88	85	78	70	85	82	68	72	71	68	66	67	79	76	83	92	89	75	74	70	57	66	73	68	82	83	75.0
	Minimum	36	44	54	53	54	61	64	46	41	55	62	42	38	54	56	45	45	46	50	53	55	58	53	43	50	49	52	47	47	57	59	50.6
Paterson	Maximum	72	68	65	73	89	89	86	72	74	86	82	65	68	73	69	70	68	80	78	79	93	90	78	74	68	58	74	79	74	81	82	76.0
	Minimum	38	43	56	57	56	66	71	45	44	55	62	43	38	55	56	45	45	49	46	52	55	60	53	46	51	49	51	47	48	60	60	51.7
Plainfield	Maximum	66	68	65	72	90	91	86	71	75	87	74	64	72	72	60	70	70	82	77	85	94	90	74	75	61	59	71	76	75	85	86	75.6
	Minimum	35	39	55	54	50	60	62	42	38	52	61	40	35	52	54	44	43	46	44	51	51	59	51	42	52	48	52	45	49	56	58	49.0
Ridgefield	Maximum	70	68	63	68	88	90	81	68	72	87	73	61	67	72	60	67	68	78	75	77	93	90	71	74	54	59	72	77	72	82	86	73.6
	Minimum	40	43	53	54	53	62	47	44	42	53	61	40	37	51	56	44	45	48	51	50	63	63	51	45	51	48	49	46	49	58	62	50.3
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	63	67	62	68	86	86	80	67	68	82	72	62	62	71	62	66	67	77	73	74	88	86	70	72	57	58	70	73	73	79	81	71.7
	Minimum	43	51	54	53	53	66	54	47	51	54	55	46	50	56	55	45	52	51	55	53	60	63	54	53	50	49	53	55	56	56	62	53.4
The Southern Interior.																																	
Belleplain	Maximum	68	69	72	64	86	89	90	76	72	68	78	....	78	85	74	68	68	84	76	91	94	87	76	77	67	60	65	74	64	81	83	76.1ᵃ
	Minimum	35	50	56	54	54	54	66	38	41	41	54	....	32	54	53	43	42	39	57	50	63	65	58	39	50	50	49	45	51	51	52	49.5ᵃ
Bridgeton	Maximum	70	65	74	66	88	80	87	69	71	84	75	65	69	80	65	67	69	83	77	93	94	89	75	76	54	63	70	77	70	82	84	75.2
	Minimum	45	44	56	53	56	63	46	45	52	60	45	39	42	59	46	41	48	51	51	60	63	59	46	45	48	50	47	49	55	56	58	50.9
Burlington	Maximum	74	73	76	68	86	90	95	75	76	88	86	75	74	76	67	64	71	85	80	94	95	89	76	77	67	58	70	78	71	84	81	78.2
	Minimum	53	44	51	54	56	63	69	47	42	55	62	45	36	56	56	47	47	48	56	53	60	65	57	45	53	49	52	50	51	59	59	52.9
Camden	Maximum	73	68	76	67	90	91	89	71	78	86	77	65	74	77	64	67	71	83	82	94	98	90	73	80	56	58	71	78	67	87	88	77.1
	Minimum	39	45	56	54	58	60	64	48	44	60	55	47	38	62	57	48	46	50	58	52	62	65	53	48	52	49	53	50	52	61	61	53.1
Freehold	Maximum	70	65	69	68	85	89	86	79	70	87	80	66	73	74	69	67	68	79	74	87	94	91	84	75	60	57	66	73	64	82	86	75.4
	Minimum	39	41	53	51	51	62	65	43	41	41	61	40	36	55	57	44	46	46	51	52	55	62	54	47	51	49	51	45	46	56	61	50.1
Hammonton	Maximum	71	70	76	61	83	91	89	70	73	85	71	65	71	83	64	62	69	84	75	93	95	89	74	77	55	59	68	59	65	82	85	74.6
	Minimum	44	50	53	54	59	65	42	42	55	62	46	42	54	61	42	41	46	52	53	64	62	58	47	52	50	51	52	51	44	58	59	52.3
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Indian Mills	Maximum	72	65	75	64	88	93	89	80	75	88	77	64	75	78	70	68	70	82	77	93	97	91	72	78	67	59	61	75	67	84	86	76.8
	Minimum	34	40	54	53	54	57	65	43	39	54	61	43	33	56	56	47	43	44	58	52	59	65	57	40	51	49	51	46	51	56	58	50.6
Lakewood	Maximum	67	62	68	67	86	89	86	78	68	87	78	68	69	74	67	67	66	81	75	85	89	90	76	73	65	57	65	70	63	81	87	74.3
	Minimum	34	42	53	50	54	64	67	43	38	54	63	43	34	55	57	47	47	45	50	53	56	63	56	43	52	49	50	47	47	57	60	50.7
Moorestown	Maximum	70	65	70	66	86	88	85	67	75	84	74	63	71	75	63	66	68	81	76	91	93	87	71	74	54	59	67	75	68	83	83	74.1
	Minimum	38	42	55	54	57	62	53	45	43	57	52	43	37	59	54	46	47	50	55	53	61	65	48	45	51	49	51	49	50	60	57	51.2
Pemberton	Maximum	71	66	75	64	90	90	86	81	75	86	78	68	75	74	71	67	72	82	77	92	96	93	82	77	72	57	68	76	70	86	85	77.5
	Minimum	37	43	56	54	46	59	64	46	40	55	62	45	35	56	57	47	45	48	56	54	59	64	57	44	53	51	51	48	51	59	60	51.7
Pleasantville§§	Maximum	64	60	63	61	87	88	90	75	65	80	78	66	66	81	66	64	63	84	66	95	97	78	77	71	67	56	65	68	63	73	85	73.0
	Minimum	33	42	52	52	54	57	61	46	39	54	57	45	32	53	57	49	41	41	58	53	64	64	58	41	51	50	50	46	55	52	59	50.5
Runyon	Maximum	68	68	74	70	88	92	86	74	75	89	82	68	74	74	70	70	84	85	78	90	96	92	78	79	75	68	71	76	76	85	87	78.5
	Minimum	35	42	50	52	58	60	74	42	31	52	62	46	28	64	62	43	41	46	41	56	52	55	51	35	51	50	50	40	46	50	52	48.9
Trenton	Maximum	71	66	72	67	87	89	84	68	76	84	74	62	71	73	63	66	68	78	77	91	94	86	71	74	53	57	67	74	66	84	83	74.1
	Minimum	41	47	55	53	56	64	54	47	49	55	53	45	42	56	55	46	49	50	56	54	60	62	55	50	50	49	52	50	51	58	60	52.4
Tuckerton	Maximum	55	56	58	60	82	81	82	62	62	68	70	60	58	72	66	65	61	86	70	84	86	74	72	66	60	54	60	62	59	72	....	67.4ᵃ
	Minimum	42	39	45	50	52	50	55	50	46	48	51	46	46	51	50	49	45	52	49	58	62	68	49	50	48	46	50	50	52	50	....	50.0ᵃ
Philadelphia, Pa	Maximum	71	69	75	68	87	89	86	68	74	83	75	64	71	76	67	67	69	81	78	92	95	86	73	74	57	59	72	78	69	83	83	75.5
	Minimum	47	52	58	56	62	66	57	51	56	60	59	51	50	61	58	48	54	55	58	55	69	68	59	55	52	51	54	55	57	62	63	56.7
The Sea Coast.																																	
Asbury Park	Maximum	55	54	53	56	86	89	85	76	60	77	75	69	61	72	61	59	59	81	78	63	75	79	75	70	61	56	60	63	62	66	73	68.0
	Minimum	39	44	47	46	50	62	68	49	47	50	48	48	46	50	52	48	49	50	56	53	56	56	54	51	51	50	51	51	53	53	59	51.2
Atlantic City	Maximum	56	56	60	57	71	76	89	59	60	62	78	58	59	72	67	63	61	86	68	79	85	70	69	68	60	55	57	64	57	68	72	66.5
	Minimum	46	49	50	50	51	58	56	49	49	55	54	50	46	54	53	50	49	52	55	54	65	59	57	52	52	50	52	50	54	56	58	52.7
Long Branch	Maximum	60	59	60	61	87	89	86	64	63	84	75	63	60	71	60	61	61	80	68	69	83	86	73	69	60	55	62	66	60	73	81	69.3
	Minimum	35	44	51	49	49	65	54	48	43	56	59	47	38	57	54	48	47	49	55	54	55	63	47	47	49	46	50	49	51	55	59	50.7
Sandy Hook	Maximum	59	59	58	60	80	84	76	66	63	81	71	61	61	70	60	63	61	75	67	69	83	84	70	71	56	57	62	66	62	74	81	68.1
	Minimum	42	46	49	49	49	58	55	50	50	57	55	48	48	57	52	48	51	52	53	52	56	57	56	53	51	50	53	54	55	57	61	52.4

ᵃ, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	....	.176	.038	.114	.096	.224	.272	.312	.216	.176	.182	.176	.200	.168	.024	.036	.168	.160	.224	.214	.144	.208	.266	.256	.126	*	.028	.208	.208	.088	.224	4.932
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14	22	22	14	11	9	28	26	22	12	18	33	21	21	21	......
Pleasantville**	Evaporation	.224	.160	*	*	.218	.256	.432	.256	.256	.208	.304	.128	.288	.134	.112	.224	.096	.288	.288	.240	.304	.276	.256	.282	.010	.100	.176	.242	.032	.160	.304	6.254
	Wind movement	46	30	105	7	31	36	107	86	54	32	38	159	112	52	55	63	59	36	60	73	53	61	111	36	85	145	66	87	75	40	65	2065
Runyon	Evaporation	.030	.120	.070	.010	.240	.280	.290	.260	.270	.270	.230	.190	.210	.120	.020	.160	.180	.230	.240	.220	.220	.240	.360	.240	.050	.010	.190	.240	.095	.190	240	5.765
	Wind movement	31	35	33	56	60	47	90	60	24	88	87	27	32	50	10	17	24	50	30	38	32	49	28	25	25	52	61	50	40	26	24	1301

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. JUNE, 1934. No. 6.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

This was the second warmest June on record, the average of 72.6 degrees being exceeded during the past fifty years by only that of June, 1925, when the average was 73.6 degrees. Almost every day was above the normal, the 8th, 9th, 18th and 19th being the only ones below it, The highest temperatures occurred quite generally on the 29th and were near, or a few degrees above, the 100-degree mark. The lowest readings were mostly in the forties and occurred generally on either the 7th, 8th or 9th.

The rainfall average for the State was practically normal, but ranged rather widely at the various stations, as is characteristic of this season of the year. The Coast section had 76% of its normal, the Highlands and Southern Interior each experienced 89%, while the Red Sandstone Plain had 120%. Approximately three-fourths of the entire month's rainfall was recorded on the five days from the 10th to 12th, inclusive, and the 18th and 19th. Light to moderate scattered showers occurred on the 22d, 23d, 27th, 28th and 30th. In general, there was enough rainfall for good crop growth, although the excessive heat of the closing days of the month began to make the need for rain felt.

No damage by wind or hail was reported though some light hail fell at a few stations.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 37 stations, was 72.6°, which was 3.8° above normal. The highest temperature was 103° at Belvidere on the 29th, and the lowest, 38°, at Layton on the 8th. The greatest daily range of temperature was 42° at Layton on the 15th. The highest monthly mean temperature was 75.8° at Camden, and the lowest, 69.6° at Layton and Long Valley.

The temperature departure from the normal for the year 1934, to date, by sections, is: The Highlands, +0.1°; Red Sandstone Plain, —0.8°; Southern Interior, —1.0°; Sea Coast, —0.9°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 44 stations, was 3.68 inches, which was 0.03 inch below normal. The greatest monthly precipitation was 6.41 inches, at Long Valley, and the least, 1.64 inches at Northfield. The greatest amount of precipitation in any 24 consecutive hours was 4.60 inches at Little Falls on the 18-19th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 7, or 3 less than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, —0.75 inch; Red Sandstone Plain, +0.76 inch; Southern Interior, —1.27 inches; Sea Coast, —2.35 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 11 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 50 miles per hour from the southeast at Atlantic City on the 19th.

MISCELLANEOUS.

The per cent of possible sunshine was 74, or 13 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.91 inches, or 0.07 inch below normal. The highest reading was 30.41 inches at Ridgefield on the 4th, and the lowest 29.38 inches at Trenton on the 8th and at Long Branch on the 19th.

The mean stage of the Delaware River at Phillipsburg was 2.0 feet, and the highest 4.2 feet on the 21st and 22d. At Trenton the mean stage was 1.2 feet, and the highest 2.6 feet on the 21st.

Thunderstorms occurred on the following dates: 6, 7, 10, 11, 12, 19, 22, 23, 27, 28, 29 and 30. Dense fog occurred on the following dates: 1, 2, 3, 4, 5, 13, 19, 24, 28 and 29. Light hail fell in scattered sections of the State on the 6th, 12th and 22d.

COMPARATIVE DATA FOR JUNE

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	68.7	−0.1	97	39	1.79	−1.92	3.37	0.72	0	....	....	....	....
1886	67.1	−1.7	91	41	3.38	−0.33	5.79	2.22	0	....	....	....	....
1887	68.2	−0 6	97	42	6.77	+3.06	10.29	4.21	0	10	....	....	....
1888	70.8	+2.0	99	39	2.59	−1.12	5.69	1.67	0	6	....	....	....
1889	69.9	+1.1	91	40	3.73	+0.02	6.75	2.39	0	10	....	....	....
1890	70.7	+1.9	95	42	3.59	−0.12	5.16	0.99	0	7	11	13	6
1891	69.7	+0.9	102	38	2.92	−0.79	6.71	1.24	0	5	14	9	7
1892	72.4	+3.6	98	44	3.85	+0.14	6.12	1.58	0	11	10	12	8
1893	69.7	+0.9	103	40	2.95	+0.76	7.02	0.46	0	8	10	11	9
1894	70.6	+1.8	102	35	2.28	−1.43	5.90	0.99	0	9	14	11	5
1895	71.7	+2.9	103	39	3.24	−0.47	5.99	0.93	0	10	11	11	8
1896	68.1	−0.7	96	37	5.46	+1.75	13.45	2.64	0	10	12	10	8
1897	66.1	−2.7	95	35	3.38	−0.33	5.50	2.12	0	10	10	13	7
1898	70.1	+1.3	100	38	2.10	−1.61	3.54	1.13	0	8	14	12	4
1899	72.3	+3.5	103	38	2.50	−1.21	4.34	1.01	0	7	15	10	5
1900	70.4	+1.6	97	39	3.08	−0.63	4.91	1.10	0	8	12	12	6
1901	70.0	+1.2	103	35	**1.57**	−2.14	4.36	0.73	0	5	18	8	4
1902	67.5	−1.3	99	37	6.57	+2.86	10.21	4.54	0	11	14	11	5
1903	**64.0**	−4.8	92	37	**7.68**	+3.97	**15.02**	2.39	0	15	6	10	14
1904	68.6	−0.2	100	34	3.13	−0.58	5.44	1.91	0	12	13	10	7
1905	68.3	−0.5	96	35	3.43	−0.28	8.71	1.67	0	10	11	12	7
1906	70.4	+1.6	98	38	4.48	+0.77	9.18	1.45	0	12	11	11	8
1907	64.7	−4.1	96	31	4.41	+0.70	6.85	3.15	0	10	12	10	8
1908	69.9	+1.1	99	35	2.32	−1.39	4.63	0.77	0	4	16	12	2
1909	70.0	+1.2	99	36	3.26	−0.45	5.70	1.71	0	12	9	10	11
1910	66.9	−1.9	95	34	5.17	+1.46	8.01	2.66	0	13	9	10	11
1911	68.9	+0.1	97	40	5.36	+1.65	10.11	2.84	0	14	9	12	9
1912	68.0	−0.8	98	33	1.94	−1.77	3.61	0.91	0	8	9	12	9
1913	69.1	+0.3	98	31	1.80	−1.91	3.76	0.68	0	5	19	8	3
1914	68.5	−0.3	98	35	2.66	−1.05	4.85	1.09	0	7	16	9	6
1915	67.0	−1.8	95	37	3.12	−0.59	6.51	1.40	0	11	13	10	7
1916	64.7	−4.1	87	36	4.20	+0.49	5.99	2.22	0	13	10	9	11
1917	68.9	+0.1	95	40	4.27	+0.56	7.14	2.80	0	12	13	10	7
1918	66.3	−2.5	96	32	3.43	−0.28	6.21	1.35	0	8	15	9	6
1919	69.5	+0.7	99	38	3.16	−0.55	3.58	**0.37**	0	8	16	7	7
1920	68.4	−0.4	98	38	6.18	+2.47	11.26	3.12	0	12	13	9	8
1921	70.4	+1.6	100	33	3.23	−0.48	5.64	1.40	0	8	18	7	5
1922	71 1	+2.3	95	39	6.31	+2.60	11 50	2.97	0	15	12	9	9
1923	72.5	+3.7	**106**	37	2.08	−1.63	5.44	0.72	0	7	18	8	4
1924	66.8	−2.0	95	**30**	4.20	+0.49	7.32	1.72	0	13	11	11	8
1925	**73.6**	+4.8	103	36	3.10	−0.61	6.16	0.72	0	9	17	9	4
1926	64.9	−3.9	97	31	2.60	−1.11	4.73	1.29	0	11	12	9	9
1927	65.4	−3.4	97	31	3.16	−0.55	5.24	1.46	0	10	15	9	6
1928	66.6	−2.2	93	36	6.75	+3.04	10.34	3.03	0	15	10	9	11
1929	69.5	+0.7	98	33	3.11	−0.60	5.41	1.41	0	9	15	9	6
1930	70.8	+2.0	98	**30**	4.17	+0.46	6.48	2.46	0	8	16	8	6
1931	69.3	+0.5	101	40	4.84	+1.13	7.42	2.18	0	10	16	7	7
1932	69.3	+0.5	98	**30**	3.68	−0.03	6.59	1.83	0	10	13	8	9
1933	71.0	+2.2	105	32	2.79	−0.92	5.71	0.52	0	9	17	8	5
1934	72.6	+3.8	103	38	3.68	−0.03	6.41	1.64	0	7	16	9	5
Period	68.8	....	106	30	3.71	....	15.02	0.37	0	10	13	10	7

W. B. O. Philadelphia 7-23-34-875.

Climatological Data for June, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	73.3	+4.4	103	29	48	8†	37	4.29	+0.29	1.84	0	7	20	5	5	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	71.6	+6.6	99	29	46	18	40	5.28	+0.82	3.67	0	7	23	0	7	sw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	......	......	......	......	48	8	....	3.89	−0.55	2.10	0	6	20	5	5	e.	Brice E. Riker.
Dover	Morris	600	50	70.8^{a}	+4.0	97	29	44	8	36	3.95	−0.48	2.18	0	8	8	16	6	......	William C. Harris
Layton	Sussex	480	33	69.6	+3.9	96	29	38	8	42	3.37	−1.16	2.30	0	6	15	3	12	sw.	A. M. Depue.
Long Valley	Morris	520	4	69.6^{b}	......	96	29	41	7	37	6.41	......	3.34	0	6	21	3	6	s.	S. N .Dilts.
Newton	Sussex	769	51	70.4	+2.4	96	29	45	8	30	3.72	−0.76	1.65	0	6	12	9	9	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	73.1	+3.8	100	29	47	8	36	3.80	+0.07	1.25	0	8	18	5	7	......	Town Engineer.
Sussex	Sussex	442	39	74.4	+7.6	97	29	49	8	35	1 86	−2.22	0.56	0	7	16	5	9	......	A. J. W. Mowatt
Means and extremes	......	......	....	71.6	+4.7	103	29	38	8	42	4.06	−0.50	3.67	0	7	17	6	7	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	70.1	+2.8	96	29	42	8†	34	3.14	−0.82	1.38	......	6	13	3	14	ne.	John Kline.
Canoe Brook	Essex	173	4	69.8	......	98	29	39	8	39	4.48	......	2.94	......	9	14	14	2	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30	......	......	......	......	......	......	....	4.38	+0.42	1.82	......	10	9	16	5	......	Paul Molitor. Sr.
Elizabeth	Union	45	55	73.7^{a}	+3.3	98	21	51	8	36	4.16	+0.56	2.00	0	8	22	5	3	sw.	Union County Park Comm.
Flemington	Hunterdon	140	§48	73.6	+4.1	102	29	48	8	34	5.21	+1.60	1.92	0	5	19	7	4	w.	Hiram E. Deats.
Jersey City	Hudson	10	36	74.0	+3.1	100	29	57	4†	32	3.52	−0.26	2.00	0	6	12	14	4	sw.	S. K. Pearson.
Lambertville	Hunterdon	430	47	71.5	+2.0	97	29	48	8	30	5.57	+1.81	2.19	0	7	18	7	5	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	72.4	+3.7	100	29	45	8	37	5.45	+1.43	4.60	0	7	20	6	4	w.	Passaic Valley Water Co.
New Brunswick	Middlesex	110	81	72.7	+3.5	99	29	51	8	34	3.92	+0.24	1.46	0	6	15	12	3	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	......	......	......	......	......	......	....	3.71	+0.16	1.70	0	7	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	71.5	+1.5	96	29	47	8	29	4.06	+0.36	3.28	0	5	19	6	5	w.	William H. Meyer.
Plainfield	Union	120	46	72.5	+3.9	101	29	50	8	35	3.34	−0.53	2.59	0	6	9	17	4	sw.	S. K .Pearson.
Ridgefield	Bergen	80	17	72.6	+5.0	97	29	52	8	30	3.22	−0.92	2.08	0	7	15	10	5	sw.	George P. Kirsten.
Somerville	Somerset	70	51	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	......	......	......	......	......	......	....	4.04	+0.68	2.16	......	8	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	314	64	72.4	+3.6	97	29	57	4	31	3.21	−0.12	1.77	0	9	7	16	7	w.	U. S. Weather Bureau.
Means and extremes	......	......	....	72.2	+3.3	102	29	39	8	39	4.16	+0.36	4.60	0	7	15	10	5	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	73.0	+4.1	99	29	41	9	40	2.04	−1.40	1.22	......	5	19	8	3	s.	A. F. Waldron.
Bridgeton	Cumberland	30	51	74.9	+2.8	101	29	52	8	32	2.64	−1.28	0.94	0	5	26	2	2	sw.	Bennett K. Matlack
Burlington	Burlington	12	§48	75.6	+3.9	101	29	52	9	33	3.80	+0.11	1.35	0	8	23	3	4	sw.	Public Service Power Co.
Camden	Camden	20	2	75.8	......	101	29	52	8	32	3.67	......	1.18	0	9	8	19	3	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	73.8	......	100	29	49	8†	35	2.44	−1.17	1.15	0	5	26	1	3	sw.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	74.6	......	99	29	51	7	33	5.21	+1.45	1.60	0	8	18	10	2	s.	Geo. W. Lobley.
Hightstown	Mercer	110	41	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	Braun Bros.
Indian Mills‡‡	Burlington	76	45	73.6	+3.7	99	29	49	9	36	4.89	+0.96	1.68	0	7	11	16	3	se.	James M. Armstrong.
Lakewood	Ocean	54	30	72.8	+4.6	98	29	47	8†	33	3.42	−0.59	1.61	0	6	16	11	3	sw.	R. W. Holman.
Moorestown	Burlington	62	71	73.6	+3.4	99	29	51	8	30	3.54	−0.24	1.10	0	9	12	15	3	sw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	27	......	......	......	......	......	......	....	1.64	−1.65	0.59	0	9	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	74.4	......	100	29	49	9	33	4.49	......	1.70	0	10	19	9	2	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	72.0	......	98	29	48	8	33	2.23	−1.27	0.70	......	8	25	3	2	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	......	......	......	......	......	......	....	2.14	......	0.67	0	6	23	3	4	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	72.1	......	99	29	45	15	40	4.13	+0.60	1.93	......	5	22	7	1	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	73.5	+4.0	100	29	53	8	32	3.41	+0.32	1.18	0	8	5	20	5	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	......	......	......	......	......	......	....	4.22	......	1.80	0	6	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	41	72.4	+3.6	95	29	54	12	24	2.48	−1.25	0.86	0	7	17	9	4	sw.	John H. Brown.
Philadelphia, Pa	......	114	63	76.2	+4.8	102	29	59	9	30	3.22	−0.02	1.70	0	9	8	17	5	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	73.7	+3.8	101	29	41	9	40	3.32	−0.42	1.93	0	7	18	9	3	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	71.8	+4.3	98	29	53	1	31	1.81	−1.90	0.81	0	7	11	10	9	sw.	S. W. Triano.
Atlantic City	Atlantic	52	61	70.7	+4.1	89	25	55	8	23	2.48	−0.56	0.66	0	7	8	13	9	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	71.6	+4.5	99	29	50	9	31	3.22	−0.64	1.36	0	9	12	14	4	se.	William D. Martin.
Sandy Hook	Monmouth	22	36	71.2	+3.4	96	29	55	4	30	3.40	−0.38	1.59	0	10	11	11	8	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	71.3	+4.1	99	29	50	9	31	2.73	−0.87	1.59	0	8	10	12	8	sw.	
For the State	......	......	....	72.6	+3.8	103	29	38	8	42	3.68	−0.03	4.60	0	7	16	9	5	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for June, 1934

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware									T.	T.	1.84	.60	.13					T.	1.45				.21		T.		.01	.05				4.29
Charlotteburg	Passaic										.19	.06	.52	.54						3.67			.21						.09				5.28
Culvers Lake	Delaware	T.					T.			.29	T.	.30	.43					T.		2.10								.75	.02				3.89
Dover	Passaic									.19	.11		.96						*	2.18			*	.35				.16					3.95
Layton	Delaware									T.	.24	.03	.25	T.						2.30				.10				.45					3.37
Long Valley	Morris											.78	.80	.18					T.	3.34				T.				.06	1.25				6.41
Newton	Delaware				T.						.38	.05	1.65							1.16				.20				.28	T.				3.72
Phillipsburg	....do				T.					T.	.79		.48	.05					.32	1.25			T.	.84			T.	.02	.05		T.		3.80
Sussex	Hudson							.19		T.	.16	.04	.46							.56				.01				.44					1.86
The Red Sandstone Plain.																																	
Boonton‖‖	Passaic				T.	T.					.19	.06		.54						1.38	.70			.27				T.	T.				3.14
Canoe Brook‖‖	Essex										.09	.13	.03	.37						2.94	.36			.23				.04	.29				4.48
Chatham ‖	....do				T.						.12	.16		.35						1.82	1.36			.22	.02	.08		.02	.23	T			4.38
Elizabeth	Coast				T.			T.		T.	.02	.20	.66						*	2.00				.16				.03	1.09				4.16
Flemington	Raritan				T.		T.			T.		.70	.85						T	1.92			T.	1.58							.16		5.21
Jersey City	Coast			T.	T.		T.			.05		.05	.90							2.00				.12		T.			.40		T.		3.52
Lambertville	Delaware						.56			T.	.03	.43	2.06						T.	2.19			.03	.27									5.57
Little Falls.‖‖	Passaic										.13	.04		.38						3.42	1.18			.23					.07				5.45
New Brunswick	Raritan				T.	T.	T.	T.		T.	T	.42	1.46						T.	1.43	.09			.31							.21		3.92
New Milford‖‖	Hackensack										.09	.03		.51						1.07	1.70			.27					.04				3.71
Paterson	Passaic									T.	.09	.02	.38							3.28				.29									4.06
Plainfield	Raritan									.02	.18		.37						.02	2.57				.18				T.			T.		3.34
Ridgefield**	Hackensack			T.	T.					T.	.14	.02	.74						.03	2.05				.20			T.	.04			T.		3.22
Somerville	Raritan																																
Woodcliff Lake‖‖	Hackensack										.12	.02		.35						1.16	2.16			.15	.04				.04				4.04
New York, N. Y***	Coast			T.	T.		T.			.04	.05		.95						.14	1.63			.06	.09		T.	T.	.09	.16		T.		3.21
The Southern Interior.																																	
Belleplain	Tuckahoe										.14		.55				.05		1.22									.08					2.04
Bridgeton	Delaware										.38		.88						.94	T.							T.			.05	.39		2.64
Burlington	Delaware						.03			.20		.54	.51						1.35	.15			.97					.05					3.80
Camden***	..do				T.					.01	.60	.09	.53						.47	.71			.81	T.			.10	.35	T.				3.67
Freehold	Raritan											.24	.85							1.15	.07		.13										2.44
Hammonton	Mullica										1.60		1.10						1.35	.10			.20				.63	.03		.20			5.21
Hightstown	Raritan																																
Indian Mills	Mullica									T.	.46	.22	.92						.07	1.68			.98					.56					4.89
Lakewood	Metedeconk							T.			.02	.08	1.08							1.61			.63										3.42
Moorestown‖‖	Delaware										.03	.50		.64						1.10	.52			.60	.01			.06	.08				3.54
Northfield	Coast							.02			.40	.07	.29					.05	.02	.59								.17			.03		1.64
Pemberton	Delaware				T.					T.	.08	1.27	.53	T.						1.70	.01		.27	.09				.24	.12		.18		4.49
Pleasantville‖‖	Coast							.01				.45		.28						.70	.05							.34	.02		.38		2.23
Port Norris	Maurice						.37					.14	.32						.67	.50											.14		2.14
Runyon	Coast											.23	1.70							1.70				.28							.22		4.13
Trenton***	Delaware			T.	T.		T.			.06	.61	T.	1.18	T.					.32	.85			.21	.17			T.	.01					3.41
Trenton No. 2‖‖	....do				T.	T.		T.			.08	.71	T.	1.39						1.56	.24			.29									4.27
Tuckerton	Coast										.11	.05	.31							.71	.08							.36			.86		2.48
Phila., Pa***	Delaware		T.		T.		T.	T.		.01	.37	.01	.35						.78	.92			.60	.02			T.	.16	T.				3.22
The Sea Coast.																																	
Asbury Park	Coast									T			.66						.09	.72			.29	.02			.01				.02		1.81
Atlantic City***	....do						T.			T.	.66		.28					T.	.19	.45				T.			T	.27		.59	.04		2.48
Long Branch**	....do						.03			.01	.07		1.08						.15	1.21			T.	.54			.03				.10		3.22
Sandy Hook***	....do			T.	T.		.04			T.	.23		1.21	.01					.16	1.43			.04	.22			.01	T.			.05		3.40

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level.)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	29.93	30.40	8	29.45	19	15.3	50	se.	19	82	71	81	77
Camden						8.6	26	w	12	74	53	66	
Long Branch	29.91	30.40	8	29.38	19					74	60	70	75
New York, N. Y	29.90	30.40	8	29.39	19	13.3	38	nw.	19	74	58	66	73
Philadelphia, Pa	29.92	30.39	8	29.40	19	12.0	35	sw.	10	73	50	60	66
Ridgefield	29.90	30.41	4	29.40	19								
Sandy Hook	29.90	30.40	8	29.39	19	11.9	36	nw.	19	79	63	76	70
Trenton	29.90	30.38	8	29.38	19	9.3	27	nw.	12	75	52	64	76

Daily Temperatures for June, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	86	89	93	84	90	91	82	78	70	87	86	77	79	82	89	90	87	79	69	87	93	90	89	90	86	85	89	85	103	93	....	85.9
	Minimum	63	63	65	58	62	68	65	48	48	67	62	57	55	56	52	59	57	57	62	55	61	68	68	62	65	57	61	65	70	65	....	60.7
Charlotteburg	Maximum	89	85	87	94	90	90	91	79	76	84	93	78	74	82	83	90	88	82	67	67	90	92	88	89	89	89	90	92	99	96	....	86.1
	Minimum	60	60	61	54	56	63	62	48	50	64	62	48	56	53	49	61	49	46	59	59	54	62	64	57	61	49	52	64	63	63	....	57.0
Dover	Maximum	85	85	86	75	86	87	78	71	68	85	84	71	77	78	88	87	79	....	70	85	91	87	83	87	83	78	84	81	97	89	....	82.2^a
	Minimum	63	63	59	55	52	69	59	44	54	66	62	53	58	55	52	61	....	51	60	54	60	70	68	63	63	57	61	65	66	58	....	59.3^a
Layton	Maximum	85	86	88	78	85	87	80	74	67	86	82	76	77	80	86	87	85	74	68	83	91	86	86	85	83	80	82	83	96	92	....	82.6
	Minimum	62	54	64	58	60	69	62	38	41	61	60	49	57	52	44	54	49	49	60	52	54	66	62	54	58	53	57	65	67	69	....	56.7
Long Valley	Maximum	83	88	87	76	85	80	73	70	....	....	85	73	74	78	84	85	82	73	68	82	91	87	84	88	83	80	88	82	96	93	....	82.1^b
	Minimum	59	60	57	55	57	60	41	51	....	....	61	52	55	55	47	56	54	51	60	51	56	69	65	60	61	52	60	64	66	62	....	57.0^b
Newton	Maximum	83	85	88	79	85	86	79	72	67	84	83	77	77	78	83	85	85	80	67	81	89	85	85	85	85	81	83	78	96	91	....	82.1
	Minimum	53	63	64	60	60	68	57	45	53	63	60	53	56	54	55	59	55	53	60	54	60	67	64	60	64	56	57	56	67	65	....	58.7
Phillipsburg	Maximum	86	88	89	81	88	90	83	76	71	89	86	76	78	83	87	89	84	76	69	87	94	88	84	89	93	86	91	84	100	91	....	85.2
	Minimum	60	61	64	59	62	68	67	47	58	66	64	56	58	56	51	56	57	59	60	54	60	69	67	62	65	57	64	67	69	67	....	61.0
Sussex	Maximum	89	89	92	83	90	91	84	80	77	87	82	80	76	79	88	86	90	83	77	86	89	88	88	89	89	80	83	86	97	92	...	85.7
	Minimum	67	66	64	61	65	71	67	49	58	68	66	53	58	57	53	58	59	57	66	61	60	72	71	66	66	65	57	61	74	73	....	63.0
The Red Sandstone Plain.																																	
Boonton§§	Maximum	83	83	87	77	84	85	76	76	72	85	83	75	77	79	84	85	83	76	68	83	89	88	83	85	83	81	85	84	96	91	....	82.2
	Minimum	62	63	62	55	56	65	65	42	42	57	61	57	58	52	53	57	54	49	51	58	59	66	66	59	64	54	61	63	65	64	....	58.0
Canoe Brook§§	Maximum	86	86	88	79	87	87	78	69	82	88	84	79	78	78	84	87	81	75	73	84	91	87	85	88	83	82	83	85	98	91	....	83.5
	Minimum	56	59	62	54	57	67	64	39	46	63	58	50	60	49	45	56	50	48	61	49	55	64	65	56	59	51	60	63	61	59	....	56.2
Elizabeth	Maximum	85	92	88	74	83	90	77	....	80	95	92	81	84	82	89	91	82	80	71	90	98	87	81	88	84	79	81	80	97	90	....	85.2^a
	Minimum	61	64	65	57	61	69	68	....	51	67	62	58	62	55	54	63	62	55	62	55	62	71	67	62	68	59	66	65	66	68	....	62.2^a
Flemington	Maximum	88	88	90	84	88	90	80	78	72	88	89	79	81	82	88	88	85	77	70	89	93	87	89	91	83	85	89	87	102	93	....	85.8
	Minimum	59	60	64	58	60	68	67	48	54	68	62	57	59	56	54	61	58	55	62	57	61	69	66	63	68	58	63	67	69	68	....	61.3
Jersey City	Maximum	86	86	90	76	88	89	77	71	72	89	85	75	79	79	84	89	80	73	68	86	94	90	84	89	86	84	84	84	100	91	....	83.6
	Minimum	63	65	65	57	65	69	63	57	57	65	65	64	63	60	63	65	63	60	61	59	69	70	67	66	70	65	66	65	68	77	.. .	64.4
Lambertville	Maximum	86	84	85	80	84	85	76	71	70	85	81	80	74	78	82	86	77	74	70	81	91	89	84	88	82	83	86	84	97	90	....	82.1
	Minimum	60	63	64	57	66	67	57	48	53	65	63	59	60	55	57	58	60	57	57	57	63	68	66	62	62	58	63	66	67	70	....	60.9
Little Falls§§	Maximum	84	87	89	82	88	89	80	73	82	88	85	76	79	81	88	88	85	75	72	86	93	90	87	89	86	83	86	85	100	93	....	85.0
	Minimum	62	65	65	54	56	68	67	45	54	63	63	55	61	54	51	63	56	51	61	55	58	69	66	60	64	56	62	64	65	63	....	59.9
New Brunswick	Maximum	87	86	88	72	86	87	77	72	73	88	83	80	77	79	82	87	84	73	71	83	92	89	88	90	84	82	83	82	99	95	....	83.3
	Minimum	59	65	64	56	60	68	69	51	52	67	63	60	62	58	56	61	59	56	62	57	63	72	66	61	69	60	65	66	65	70	....	62.1
Paterson	Maximum	82	84	87	75	85	86	81	76	70	87	82	74	77	77	81	84	81	75	67	80	89	88	89	85	82	83	81	80	96	89	....	81.9
	Minimum	63	63	63	56	64	69	67	47	54	64	62	55	61	56	55	66	58	53	62	55	60	69	68	62	64	61	59	65	67	65	....	61.1
Plainfield	Maximum	87	88	91	76	89	90	78	73	73	90	86	75	80	81	86	90	80	75	69	87	95	90	85	90	87	85	86	84	101	91	....	84.6
	Minimum	57	63	65	57	60	68	67	50	51	68	63	56	60	54	53	58	60	53	61	53	60	70	61	60	65	60	60	63	69	66	....	60.4
Ridgefield	Maximum	83	87	87	79	88	89	75	72	73	89	85	77	79	79	85	86	81	76	68	83	93	86	83	89	83	81	82	82	97	91	....	82.9
	Minimum	64	65	67	55	61	69	58	52	56	65	64	58	62	58	56	65	59	56	62	54	65	72	68	64	68	60	65	64	67	69	....	62.3
Somerville	Maximum	..	....	....	....	....	..	....	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	..	....	....	....	....	....	....	....	..	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York N. Y.	Maximum	84	82	84	72	83	84	73	67	71	85	83	73	76	78	81	85	78	69	67	82	89	87	82	85	82	80	80	91	97	91	....	80.4
	Minimum	64	65	59	57	65	69	63	57	58	65	65	64	64	60	64	66	63	61	60	59	69	69	68	66	70	66	66	65	66	78	.. .	64.4
The Southern Interior																																	
Belleplain	Maximum	84	85	87	88	87	87	82	72	77	91	87	88	80	80	85	92	81	74	72	87	94	93	87	87	91	88	89	85	99	95	....	85.8
	Minimum	53	57	66	60	65	67	65	48	41	67	63	63	60	53	51	65	61	66	61	60	54	59	59	60	70	54	67	64	65	71	....	60.3
Bridgeton	Maximum	85	86	84	89	89	88	85	74	84	91	86	85	76	80	87	92	80	73	75	84	95	93	86	88	89	85	90	89	101	97	....	86.2
	Minimum	60	65	64	66	69	70	53	52	63	64	63	65	56	57	61	62	60	63	57	60	67	67	66	72	62	65	67	69	74	70	...	63.6
Burlington	Maximum	90	92	90	85	88	89	80	75	74	86	91	90	78	81	87	94	85	82	72	84	94	99	87	90	91	87	89	92	101	96	....	87.2
	Minimum	58	63	65	59	68	69	71	53	52	64	66	62	66	60	56	81	60	56	63	58	65	69	68	64	70	60	67	69	68	73	....	64.1
Camden	Maximum	90	89	90	89	89	91	82	77	76	92	86	90	80	81	87	93	84	76	71	86	95	93	84	91	88	90	90	88	101	93	....	87.1
	Minimum	60	64	64	60	67	70	71	52	56	68	66	63	67	61	58	66	62	62	64	60	65	70	69	63	67	62	65	70	69	75	....	64.5
Freehold	Maximum	88	86	90	80	89	88	82	74	75	90	85	83	79	79	86	88	86	83	72	85	91	91	84	90	88	84	87	85	100	99	....	85.6
	Minimum	58	66	64	55	65	67	69	49	49	64	64	60	65	56	56	60	58	56	63	55	61	71	61	70	75	59	65	67	65	69	....	62.1
Hammonton	Maximum	87	81	87	86	87	87	84	74	79	92	85	88	80	80	86	90	79	76	71	85	93	93	85	87	88	87	87	85	99	93	....	85 4
	Minimum	60	62	62	65	66	69	51	53	63	64	63	66	56	57	64	64	61	64	57	65	72	68	64	69	63	66	67	66	72	73	....	63.7
Hightstown	Maximum	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	. ..	..	....	....	....	....	....	....	....	....	....	....	....	....	..	....	....	....	....	..	....	....	....	....	....	....	....	.. .	....	......
Indian Mills	Maximum	90	88	88	80	90	88	81	75	74	93	85	88	80	79	87	91	82	75	70	84	94	93	84	80	86	86	89	85	99	94	....	85.3
	Minimum	54	61	63	61	64	65	68	60	49	67	64	60	65	54	51	61	61	58	62	56	61	68	66	63	69	56	65	68	67	70	....	61.9
Lakewood	Maximum	86	89	90	83	89	89	81	72	75	93	86	82	80	78	85	89	86	75	73	84	94	90	82	86	85	81	33	81	98	94	....	84.6
	Minimum	58	62	65	57	65	67	70	47	47	67	63	58	65	55	52	62	60	51	64	54	61	68	65	61	69	60	57	67	67	69	....	61.1
Moorestown	Maximum	85	85	87	85	86	88	81	74	73	90	83	87	75	79	84	90	79	73	70	83	92	89	84	87	84	84	88	85	99	91	....	84.0
	Minimum	59	63	62	60	68	69	57	51	54	67	66	63	65	61	56	65	61	60	62	59	65	69	67	65	66	60	64	69	69	73	....	63.2
Pemberton	Maximum	90	88	80	86	89	87	84	78	74	93	86	89	79	78	86	92	82	76	71	85	94	91	86	88	87	87	89	89	100	94	....	86.2
	Minimum	57	63	65	60	66	67	70	51	49	66	64	62	67	56	54	62	60	58	68	56	62	70	68	63	70	58	65	68	68	71	....	62.6
Pleasantville§§	Maximum	75	80	78	77	79	79	80	76	78	90	87	77	81	80	82	92	75	72	74	85	92	92	87	83	90	82	84	78	98	90	....	82.4
	Minimum	54	59	60	61	62	62	66	48	53	64	64	61	64	55	54	62	63	63	63	56	61	71	67	65	70	55	67	65	65	72	....	61.7
Runyon	Maximum	91	88	91	92	91	90	86	74	75	92	84	88	80	82	84	92	84	84	74	88	94	92	84	91	90	89	86	84	99	98	....	87.2
	Minimum	54	60	61	61	52	50	63	56	50	55	62	52	62	46	45	56	56	57	63	50	56	71	61	56	52	50	64	66	61	63	....	57.0
Trenton	Maximum	88	86	87	82	86	88	78	71	73	88	82	81	76	80	85	80	78	73	72	84	93	90	83	87	85	85	88	87	100	91	....	83.8
	Minimum	62	64	58	56	67	69	60	53	54	65	65	62	63	59	60	65	61	58	62	59	66	68	67	64	70	64	65	67	68	75	....	63.2
Tuckerton	Maximum	80	78	75	75	81	76	81	70	67	85	79	78	85	80	82	87	78	75	78	80	87	90	82	85	83	83	82	85	95	87	....	81.0
	Minimum	60	60	60	70	64	59	60	55	58	62	60	54	62	60	62	71	60	58	60	59	68	70	62	70	70	71	69	72	75	72	....	63.8
Philadelphia, Pa.	Maximum	86	84	86	86	85	87	81	76	75	89	86	87	77	81	86	91	84	75	71	86	93	90	85	89	86	85	89	87	102	94	....	85.3
	Minimum	65	67	63	62	70	72	63	59	59	70	66	67	67	63	67	68	65	64	62	66	69	68	71	68	74	71	68	71	72	78	....	67.2
The Sea Coast.																																	
Asbury Park	Maximum	67	76	72	70	77	83	83	79	70	88	84	81	78	78	84	84	74	69	69	83	94	83	76	76	85	75	74	77	98	95	....	79.4
	Minimum	53	60	59	58	67	66	68	57	58	68	67	62	64	57	67	68	69	62	62	58	67	71	67	66	68	64	67	67	67	76	....	64.3
Atlantic City	Maximum	69	71	70	71	70	72	80	67	67	80	86	73	82	79	80	84	73	72	72	86	78	84	84	79	89	78	78	74	84	87	....	77.3
	Minimum	60	61	62	61	61	61	58	55	59	62	66	64	64	60	63	67	63	63	64	63	68	69	68	68	69	68	68	66	66	75	....	64.1
Long Branch	Maximum	79	90	85	64	84	87	76	63	74	91	86	70	77	78	82	89	71	72	70	84	94	86	81	83	86	76	78	76	99	88	....	80.6
	Minimum	62	65	57	55	64	69	55	52	50	66	66	62	62	57	54	64	62	57	64	58	64	72	67	65	70	62	69	68	68	71	....	62.6
Sandy Hook	Maximum	80	84	83	63	84	83	73	64	72	88	82	70	76	77	83	85	71	70	69	81	88	86	76	82	84	77	74	77	96	86	....	78.8
	Minimum	62	64	56	55	60	69	59	57	58	65	66	63	64	62	63	63	62	62	62	62	68	68	68	65	71	67	67	65	66	73	....	63.7

^a, ^b, ^c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	.208	.160	.224	.224	.072	.216	.200	.208	.208	.034	.170	.190	.082	.224	.192	.216	.224	.224	.140	*	.032	.224	.182	.184	.200	.296	.200	.154	.112	.256	....	5.256
	Wind movement	18	14	25	39	20	29	22	18	28	30	22	14	21	28	27	14	18	26	72	37	21	24	11	14	20	26	11	20	18	15	....	702
Pleasantville**	Evaporation	.240	.192	.320	.288	.272	.170	.160	304	.256	.178	272	.184	.320	.256	.304	.288	.304	.220	.066	.256	.320	.224	.128	.320	.320	.276	.164	.192	.380	.296	....	7.470
	Wind movement	61	32	66	104	81	100	82	66	74	110	61	30	63	67	36	50	57	100	180	77	46	81	40	13	97	40	56	51	41	47	....	2009
Runyon	Evaporation	.240	.270	.270	240	.240	.240	.120	.240	.135	.180	.230	.260	120	.240	.240	180	.210	.240	.100	.200	.210	.210	.130	.250	.240	.240	.230	.210	.230	.220	....	6.365
	Wind movement	30	36	49	47	48	54	28	47	34	46	30	25	26	22	27	17	18	35	60	22	30	22	18	28	16	18	32	33	6	12	....	916

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

1.05
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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION.

H. O. GEREN.

TRENTON, N. J.

Vol. XXXIX. July, 1934. No. 7.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

The month averaged a little warm and a little dry. While it was the second warmest July during the past thirteen years it ranked only seventh in the record of fifty years beginning with 1885. The highest temperatures reached were generally between 94° and 100°, occurring on the 7th and 21st in the southern portion and on various dates in the northern. The lowest were mostly in the fifties and the majority were recorded on the 11th, 12th or 18th.

The rainfall during the month was quite irregularly distributed, the only dates on which general rains may be said to have occurred being the 25th, 28th and 29th. In the Highlands and Red Sandstone Plain sections, general rains of moderate to heavy amounts occurred on the 4th, 8th, 14th to 16th, inc., 25th, 28th and 29th. Over the Southern Interior and Sea Coast districts scattered showers of widely varying amounts occurred during the first decade; also from the 13th to 16th, inclusive, 20th-22d, and on the 25th, 28th, 29th and 30th. For the State as a whole, the rainfall was 76% of the normal amount, with the following percentages for the districts named: Highlands, 96%; Red Sandstone Plain, 69%; Southern Interior, 77%; Sea Coast, 87%. There was quite a wide variation in the monthly amounts at individual stations, as is usual at this time of year, some in the same county receiving as little as two inches and as much as six.

No important damage by wind or hail was reported.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 36 stations, was 75.8°, which was 2.1° above normal. The highest temperature was 100° at Camden and Flemington on the 21st and 26th, and the lowest, 43°, at Runyon on the 18th. The greatest daily range of temperature was 47° at Runyon on the 18th. The highest monthly mean temperature was 78.5° at Camden, and the lowest, 72.6° at Layton and Long Valley.

The temperature departure from the normal for the year, 1934, to date, by sections, is: The Highlands, +0.5°; Red Sandstone Plain, —0.4°; Southern Interior, —0.6°; Sea Coast, —0.3°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 44 stations, was 3.65 inches, which was 1.14 inches below normal. The greatest monthly precipitation was 6.89 inches, at Runyon, and the least, 1.85 inches at Lakewood. The greatest amount of precipitation in any 24 consecutive hours was 3.37 inches at Runyon on the 28th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 9, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, —0.93 inch; Red Sandstone Plain, —0.71 inch; Southern Interior, —2.28 inches; Sea Coast, —2.99 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 46 miles per hour from the northwest at Trenton on the 15th.

MISCELLANEOUS.

The per cent of possible sunshine was 70, or 7 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 29.96 inches, or 0.02 inch below normal. The highest reading was 30.35 inches at Long Branch and Sandy Hook on the 10th, and the lowest 29.73 inches at Trenton on the 20th.

The mean stage of the Delaware River at Phillipsburg was 1.4 feet, and the highest 7.0 feet on the 29th. At Trenton the mean stage was 0.6 foot, and the highest 3.8 feet on the 30th.

Thunderstorms occurred on the following dates: 1, 3, 4, 5, 6, 7, 8, 13, 14, 15, 16, 20, 21, 22, 24, 25, 26, 27, 28, 29 and 30. Dense fog occurred in scattered sections of the State on the 5th, 14th, 15th, 20th, 27th, 29th, 30th and 31st. Moderate hail fell at Culvers Lake on the 14th.

COMPARATIVE DATA FOR JULY

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	75.2	+1.5	100	44	3.50	−1.29	7.28	1.29	0	....	....	....	....
1886	73.0	−0.7	98	48	4.91	+0.12	7.95	2.98	0	....	....	....	....
1887	77.1	+3.4	102	54	7.67	+2.88	15.29	1.95	0	11	....	....	....
1888	71.1	−2.6	95	45	3.50	−1.29	7.03	1.25	0	9	....	....	....
1889	73.4	−0.3	95	48	10.19	+5.40	18.58	4.66	0	14	....	....	....
1890	72.5	−1.2	101	39	5.62	+0.83	7.55	3.60	0	9	12	11	8
1891	**70.1**	−3.6	95	43	5.30	+0.51	9.41	3.03	0	12	10	11	10
1892	74.3	+0.6	105	44	4.03	−0.76	7.96	2.38	0	8	12	14	5
1893	73.9	+0.2	102	40	2.72	−2.07	4.63	1.26	0	8	14	13	4
1894	75.7	+2.0	106	44	1.66	−3.13	5.00	**0.15**	0	6	14	12	5
1895	70.9	−2.8	99	41	4.26	−0.53	7.73	1.53	0	10	12	12	7
1896	75.0	+1.3	98	47	5.50	+0.71	13.29	2.45	0	13	13	10	8
1897	74.1	+0.4	102	50	**11.42**	+6.63	**20.80**	6.11	0	15	10	11	10
1898	75.3	+1.6	**107**	38	4.96	+0.17	11.72	2.23	0	10	11	13	7
1899	74.7	+1.0	98	38	5.75	+0.96	9.02	3.34	0	11	13	11	7
1900	75.9	+2.2	104	42	4.74	−0.05	7.21	1.11	0	11	15	12	4
1901	**77.3**	+3.6	**107**	45	5.87	+1.08	10.92	1.89	0	14	9	13	9
1902	73.0	−0.7	100	43	4.78	−0.01	9.92	1.83	0	13	10	12	9
1903	73.3	−0.4	100	38	5.51	+0.72	10.14	3.08	0	12	16	10	5
1904	72.3	−1.4	98	42	4.87	+0.08	8.06	2.41	0	13	13	10	8
1905	74.4	+0.7	102	42	4.06	−0.73	8.19	1.67	0	12	12	13	6
1906	72.8	−0.9	94	46	5.58	+0.79	13.25	3.44	0	12	11	14	6
1907	73.6	−0.1	96	40	2.62	−2.17	6.42	0.95	0	8	8	12	11
1908	75.6	+1.9	106	42	4.70	−0.09	8.12	1.97	0	9	12	13	6
1909	71.6	−2.1	99	36	2.12	−2.67	4.03	1.03	0	5	14	14	3
1910	75.3	+1.6	99	42	**1.36**	−3.43	5.33	0.22	0	5	12	12	7
1911	76.0	+2.3	104	42	3.64	−1.15	6.46	2.06	0	8	12	12	7
1912	73.7	0.0	100	36	3.86	−0.93	9.91	1.01	0	9	14	10	7
1913	74.4	+0.7	100	41	2.52	−2.27	4.72	1.50	0	8	20	9	2
1914	71.5	−2.2	97	40	6.05	+1.26	8.57	1.94	0	15	9	11	11
1915	72.8	−0.9	98	44	5.31	+0.52	11.06	2.23	0	14	10	13	8
1916	74.4	+0.7	97	45	5.40	+0.61	9.01	3.15	0	12	11	9	11
1917	74.2	+0.5	104	46	4.83	+0.04	7.93	2.38	0	12	10	11	10
1918	72.2	−1.5	104	39	3.93	−0.86	13.60	1.20	0	8	17	9	5
1919	73.5	−0.2	103	43	8.39	+3.60	14.14	4.45	0	14	14	7	10
1920	71.7	−2.0	96	42	5.76	−0.97	16.25	1.20	0	11	17	10	4
1921	76.5	+2.8	99	43	3.62	−1.17	7.36	1.66	0	10	14	9	8
1922	73.0	−0.7	98	44	5.79	+1.00	9.26	2.29	0	13	13	9	9
1923	71.9	−1.8	102	40	3.88	−0.91	6.28	0.93	0	11	15	8	8
1924	71.6	−2.1	98	41	2.59	−2.20	5.08	0.84	0	6	19	8	4
1925	72.0	−1.7	99	39	7.37	+2.58	10.09	4.03	0	13	15	9	7
1926	73.0	−0.7	105	40	5.46	+0.67	8.51	1.29	0	12	16	7	8
1927	72.7	−1.0	99	36	6.06	+1.27	9.34	2.95	0	11	13	10	8
1928	74.2	+0.5	96	41	6.86	+2.07	10.22	2.21	0	12	16	8	7
1929	73.0	−0.7	102	**33**	1.64	−3.15	**3.93**	0.51	0	6	17	9	5
1930	74.3	+0.6	105	42	3.98	−0.81	6.45	1.85	0	10	16	9	6
1931	76.6	+2.9	102	50	4.24	−0.55	7.55	0.80	0	11	13	10	8
1932	73.8	+0.1	98	41	2.76	−2.03	5.54	0.82	0	8	19	8	4
1933	73.4	−0.3	105	41	3.73	−1.06	6.05	1.20	0	8	16	8	7
1934	75.8	+2.1	100	43	3.65	−1.14	6.89	1.85	0	9	16	9	6
Period	73.7	....	107	33	4.79	....	20.80	0.15	0	10	13	11	7

W. B. O. Philadelphia-8-24-34-875.

Climatological Data for July, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	77.8^k	+4.6	98	3†	52	18	37^k	4.59	+0.05	1.42	0	6	24	5	2	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	73.9	+4.0	96	27	45	11	43	2.62	−1.96	0.75	0	5	27	0	4	sw.	Newark Water Dept.
Culvers Lake‡‡	Sussex	843	33	......	....	......	......	52	24	....	5.30	+0.52	2.95	0	7	19	9	3	s.	Brice E. Riker.
Dover	Morris	600	50	73.8	+2.4	94	3†	51	11†	36	3.75	−1.46	1.10	0	8	6	17	8	......	William C. Harris
Layton	Sussex	480	33	72.6	+1.7	96	3†	45	18	41	5.03	+0.63	2.52	0	9	12	7	12	sw.	A. M. Depue.
Long Valley	Morris	520	4	72.6	....	94	6†	49	11†	37	3.85	....	1.07	0	9	27	2	2	w.	S. N .Dilts.
Newton	Sussex	769	51	74.2	+1.7	96	26	51	11	35	3.94	−0.89	0.97	0	8	10	12	9	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	75.7	+1.8	97	3	52	18	36	3.57	−0.91	1.73	0	10	22	8	1	......	Town Engineer.
Sussex	Sussex	442	39	......	....	98	26	......	......	....	6.41	+2.59	2.00	0	8	14	7	10	......	A. J. W. Mowatt
Means and extremes	......	......	....	74.4	+2.7	98	3†	45	11†	43	4.34	−0.18	2.95	0	8	18	7	6	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	73.6	+1.7	96	29	51	11	34	2.95	−1.69	0.83	......	8	18	0	13	sw.	John Kline.
Canoe Brook	Essex	173	4	73.0	....	95	6†	45	18	40	2.90	....	0.89	......	7	16	7	8	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30	......	....	......	......	......	......	....	2.68	−2.26	0.67	......	9	14	9	8	......	Paul Molitor. Sr.
Elizabeth	Union	45	55	75.8	+0.6	97	7	53	18	31	2.61	−2.11	0.90	0	6	22	6	3	sw.	Union County Park Comm.
Flemington	Hunterdon	140	§48	77.0	+2.5	100	26	53	18	36	2.68	−2.17	1.03	0	8	20	10	1	sw.	Hiram E. Deats.
Jersey City	Hudson	10	36	77.7	+1.9	97	7†	62	11†	27	5.53	+1.18	2.55	0	6	10	13	8	s.	S. K. Pearson.
Lambertville	Hunterdon	430	47	75.6	+1.6	94	6†	55	11†	28	2.13	−2.51	0.57	0	7	21	4	6	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	75.8	+2.0	98	21	51	18	37	3.98	−0.74	1.68	0	7	18	9	4	w.	Passaic Valley Water Co
New Brunswick	Middlesex	110	81	76.8	+2.8	98	8	55	12	36	2.22	−3.01	0.63	0	10	18	11	2	se.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	......	....	......	......	......	......	....	3.73	−1.39	1.24	0	8	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	74.6^a	+0.1	93	21	55	11†	32	5.21	+0.91	1.56	0	7	20	8	3	w.	William H. Meyer.
Plainfield	Union	120	46	76.4	+2.8	99	7	54	12†	36	2.17	−3.38	0.62	0	6	9	14	8	sw.	S. K .Pearson.
Ridgefield	Bergen	80	17	76.0	+3.1	96	7	56	11†	31	4.04	−0.78	1.33	0	6	15	12	4	sw.	George P. Kirsten.
Somerville	Somerset	70	51	......	....	......	......	......	......	....	......	....	......	......	....	....	....	....	.....	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	......	....	......	......	......	......	....	3.36	−1.21	0.86	0	7	....	....	.. .	......	Hackensack Water Co.
New York, N. Y.	......	314	64	76.2	+2.4	94	21	62	12	24	5.67	+1.43	2.31	0	9	9	12	10	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	75.7	+1.9	100	26	45	18	40	3.30	−1.47	2.55	0	7	17	8	6	sw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	76.0^h	+2.6	98	21	48	12	....	3.42	−0.89	......	......	....	....	....	....	......	A. F. Waldron.
Bridgeton	Cumberland	30	51	76.6	+0.1	98	7†	51	17	36	6.88	+2.43	2.90	0	10	16	12	3	sw.	Bennett K. Matlack
Burlington	Burlington	12	§48	76.7	−0.1	98	7†	55	18	35	2.40	−2.54	0.55	0	9	17	11	3	sw.	Public Service Power Co.
Camden	Camden	20	2	78.5	....	100	21	57	11†	35	1.88	....	0.85	0	9	9	15	7	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	77.0	....	97	7	53	11	31	2.66	−2.60	1.27	0	9	22	3	6	sw.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	76.8	....	99	21	55	10	30	4.89	+0.35	1.03	0	10	18	13	0	s.	Geo. W. Lobley.
Hightstown	Mercer	110	41	......	....	......	......	......	......	....	......	....	......	......	....	....	....	....	......	Braun Bros.
Indian Mills‡‡	Burlington	76	45	76.2	+1.7	99	21	52	12	33	3.06	−1.69	1.28	0	8	10	14	7	s.	James M. Armstrong.
Lakewood	Ocean	54	30	76.2	+3.2	97	7	50	12	34	1.85	−3.15	0.66	0	10	15	9	7	sw.	R. W. Holman.
Moorestown	Burlington	62	71	76.6	+1.9	97	21	55	11	29	2.35	−2.35	0.78	0	9	12	12	7	sw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	27	......	....	......	......	......	......	....	2.93	−1.21	0.69	0	8	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	77.4	....	99	21	53	18	35	2.47	....	0.88	0	11	20	5	6	s.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	75.1	....	94	7	49	12	32	3.31	−0.75	1.37	......	10	26	1	4	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	......	....	......	......	......	......	....	5.64	....	2.30	0	7	19	10	2	s.	S. T. Garrison.
Runyon‡‡	Middlesex	13	11	75.4	....	99	7	43	18	47	6.89	+1.51	3.37	......	9	18	12	1	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	76.6	+2.1	96	2	57	12	29	2.90	−1.04	0.97	0	13	10	11	10	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	......	....	......	......	......	......	....	2.57	....	0.70	0	11	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	41	77.9	+3.9	95	21	67	9	18	2.83	−1.15	0.42	0	10	17	9	5	sw.	John H. Brown.
Philadelphia, Pa	......	114	63	79.3	+3.1	98	21	64	11	25	2.18	−1.97	0.85	0	11	7	14	10	sw.	U. S. Weather Bureau.
Means and extremes	......	......	....	76.6	+1.9	100	21	43	18	47	3.47	−1.01	3.37	0	10	16	10	5	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	75.1	+2.7	97	7	60	12	25	6.28	+2.01	2.15	0	12	10	9	12	s.	S. W. Triano.
Atlantic City	Atlantic	52	61	75.7	+3.6	91	16	64	17	22	2.09	−1.84	1.02	0	9	3	15	13	s.	U. S. Weather Burean.
Long Branch	Monmouth	25	26	75.6	+3.5	98	7	54	12	32	3.49	−2.36	1.16	0	12	16	8	7	s.	William D. Martin.
Sandy Hook	Monmouth	22	36	75.7	+2.2	94	7	63	12	26	4.74	−0.38	1.36	0	10	12	8	11	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	75.5	+3.0	98	7	54	12	32	4.15	−0.64	2.15	0	11	10	10	11	s.	
For the State	......	......	....	75.8	+2.1	100	21†	43	18	47	3.65	−1.14	3.37	0	9	16	9	6	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for July, 1934

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley,																																	
Belvidere	Delaware		.06		.65				1.42							.77										.45		T.	1.24				4.59
Charlotteburg	Passaic				.66				.75								.36									.19			.66				2.62
Culvers Lake	Delaware	.45						.15	.95						.65	.15												1.05	1.90				5.30
Dover	Passaic			.72				*	.90						.15	.15										.39			1.10		.34		3.75
Layton	Delaware			.30	.05				1.45						.08	.32										.30	.01	.17	2.35				5.03
Long Valley	Morris				.52				1.07						.32	.55										.93	.05	.24		.05		.12	3.85
Newton	Delaware				.83			.17	.68						.69	.38	T.									.22		.45	.52				3.94
Phillipsburg	...do		T.	.19	.07			1.25	.48					.05	.48	.46						.09			T.	.39		T.	.11	T.		T.	3.57
Sussex	Hudson				.65			.35	1.41						.01		.04									1.94			2.00			.01	6.41
The Red Sandstone Plain.																																	
Boonton‖	Passaic				.67				.83	.01						T.	.40									.12	.02		T.	.60	.30	T.	2.95
Canoe Brook‖	Essex				.89				.78	.04						T.	.16									.26				.47	.30		2.90
Chatham ‖	...do				.67				.63	.19						.01	.19									.04	T.			.58	.15	.02	2.68
Elizabeth	Coast				.45				.90						T.		T.									.34			.79	.01	.12		2.61
Flemington	Raritan				.33			T.	1.03					.09		.68	.03					T.				.33			.14	T.	.05		2.68
Jersey City	Coast				.40				1.15						T	.35					.08				T.	1.00	T.		2.55				5.53
Lambertville	Delaware				.43				.39				T	.42			.57					T.	.02			.26	T.		.04	T.			2.13
Little Falls.‖	Passaic				.48				.74								.37									.70	.01			1.64	.04		3.98
New Brunswick	Raritan				.39				.52					.04	.05		.21				.07		.04			.63			.24	T.	.03		2.22
New Milford‖	Hackensack				.49				.43								.48									.96	.03	.06		1.24		.04	3.73
Paterson	Passaic				1.03				.66								.21									.69	1.54	.02	1.06				5.21
Plainfield	Raritan				.37			.04	.51						.08	.55						T.			T.	.62			T.	T.		T.	2.17
Ridgefield**	Hackensack		T.		.50				1.02							.35									T.	.74			1.33		.10		4.04
Somerville	Raritan																																
Woodcliff Lake‖	Hackensack				.68				.71								.12									.76				.86	.07	.16	3.36
New York, N. Y***	Coast			.37				1.17	.05						T.	.32					.07				.01	1.06			2.31	T.	.31	T.	5.67
The Southern Interior.																																	
Belleplain	Tuckahoe																																3.42
Bridgeton	Delaware					.16			T.			T.	T.	2.90		.26					1.05			02	.48	1.17		T.	.40	.42	.02		6.88
Burlington	Delaware					.20		.50						.55				.13			.07	.26				.37	.10		.22				2.40
Camden***	..do		T.	.09	T.			.02	T.				T.	.22		.48	.02								.05	.80			.12	.08	T.		1.88
Freehold	Raritan				.12				1.27					.06		.06					.13		.08			.43			.41	.10			2.66
Hammonton	Mullica		.09			1.03								.42	.48	.66						.02			.69	.29			.97	.24			4.89
Hightstown	Raritan																																
Indian Mills	Mullica	.10				1.28								.48			.33									.52			.30	.03	.02		3.06
Lakewood	Metedeconk	.11			.10				.52				T.	.12			.10				.07		.02			.66			.10		.05		1.85
Moorestown‖	Delaware				.25				.10						.46		.22					.09				.32	.04			.78	.09		2.35
Northfield	Coast	.05				.56								.66	T.		.16									.34	.05			.69	.42		2.93
Pemberton	Delaware				.21	.20			.35					.20				.05			.05	.03				.36			.88	.04	.10		2.47
Pleasantville‖	Coast	.04					.43			T.					.55	.19	.19						.03			.10	.35		T.	.06	1.37		3.31
Port Norris	Maurice													2.30			.09			.10		T.				1.25	.43			1.09	.38		5.64
Runyon	Coast				.36				.81					.04			.18				1.33		.13			.63			3.37	T.	.04		6.89
Trenton***	Delaware			.17	.06		T.	.23	.35				T.	.43	.23	.07	.01				.97	T.			.02	.17			.18	.01	T.		2.90
Trenton No.2‖	...do				.38				.51	.02				T.	.45	.06	.12					.70	T.			.21	.01		T.	.09	.02		2.57
Tuckerton	Coast	.42				.39								.23	.09	.03	.36									.36			.32	.42	.21		2.83
Phila., Pa***	Delaware			.18	.02			.20	T.				.01	.22	T.	.41	T.								.01	.84			.19	.09	.01		2.18
The Sea Coast.																																	
Asbury Park	Coast				.07				1.13					.09			.10				2.15		.58			.89	T.		1.03	.23	.01		6.28
Atlantic City***	...do					.37			T	T.			T.	.39	.01	T.	.05					.04			T.	.20	.01		T.	1.01	.01	T.	2.09
Long Branch**	...do			.02	.05	T.		.59	.08					.01		.17					.73	.35			T.	1.16			.24	.06	.03		3.49
Sandy Hook***	...do			.13	.05		T.	1.21	.09				T.	T.		.22					.51				T.	1.05			1.36	.01	.11		4.74

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	29.97	30.32	10	29.77	21	13.2	33	w	16	80	75	81	68
Camden						7.3	25	n.	15	76	57	67	
Long Branch	29.97	30.35	10	29.74	21					76	63	69	72
New York, N. Y	29.95	30.35	10	29.75	21	11.6	58	nw.	3	74	53	68	70
Philadelphia, Pa	29.97	30.34	10	29.76	14	10.6	38	n.	15	73	53	61	61
Ridgefield	29.95	30.34	10	29.75	21								
Sandy Hook	29.96	30.35	10	29.75	20	10.7	43	s.	20	76	61	76	64
Trenton	29.95	30.34	10	29.73	20	8.2	46	nw.	15	75	54	64	76

Daily Temperatures for July, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	94	95	98	87	89	99	98	85	....	85	....	....	....	....	....	....	....	89	94	91	96	92	88	89	93	98	92	85	....	....	....	91.8[k]
	Minimum	64	64	65	65	58	71	74	60	....	57	56	....	....	....	....	....	54	52	64	67	68	63	57	64	66	65	74	73	....	....	....	63.7[l]
Charlotteburg	Maximum	94	92	95	91	86	94	95	95	83	88	80	78	81	86	92	90	86	87	92	94	94	91	91	90	86	95	96	90	84	86	81	89.1
	Minimum	59	60	66	64	49	70	72	58	52	49	45	49	58	62	58	63	53	46	49	60	60	59	58	56	53	70	68	72	60	63	58	58.7
Dover	Maximum	91	90	94	85	85	93	94	78	79	78	76	76	78	82	92	85	83	86	91	89	94	90	86	78	85	94	87	80	76	81	85	85.2
	Minimum	62	63	66	64	55	72	73	60	59	54	51	54	62	66	62	65	56	51	55	67	68	63	59	59	64	70	71	71	65	64	66	62.5
Layton	Maximum	92	93	96	83	87	93	96	80	83	83	80	78	84	85	94	83	83	85	91	90	95	89	87	81	87	94	89	80	83	84	84	86.8
	Minimum	53	58	61	60	51	61	75	58	52	51	47	60	62	61	60	59	48	45	50	60	64	57	47	53	65	60	71	69	63	63	63	58.3
Long Valley	Maximum	91	91	93	83	87	94	93	83	82	81	76	77	81	87	92	82	79	83	89	90	93	87	79	82	87	93	94	89	78	83	81	85.8
	Minimum	60	60	60	62	52	68	71	59	60	52	49	53	61	61	61	60	61	49	52	62	64	60	51	56	62	64	69	61	60	61	60	59.4
Newton	Maximum	89	92	95	83	87	93	95	85	83	83	86	79	83	89	91	83	80	84	89	89	93	88	84	82	87	96	90	84	81	81	83	86.7
	Minimum	61	65	66	64	55	69	73	56	57	55	51	56	61	64	64	60	52	52	56	68	67	65	55	60	62	65	70	69	63	64	64	61.6
Phillipsburg	Maximum	93	94	97	87	88	96	87	78	84	83	82	80	84	88	94	86	84	87	92	91	94	92	86	86	91	96	90	86	78	86	89	88.0
	Minimum	64	62	64	65	56	70	72	61	62	58	53	59	65	68	66	63	54	52	56	66	67	62	61	63	67	64	73	75	67	66	64	63.4
Sussex	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
The Red Sandstone Plain.																																	
Boonton§§	Maximum	90	91	91	82	86	91	91	79	83	82	79	78	78	82	90	84	80	83	88	89	92	87	84	84	84	94	88	84	96	84	84	85.7
	Minimum	60	60	64	64	54	62	74	62	56	54	51	52	59	65	61	67	52	57	54	63	65	66	58	64	60	65	70	72	65	63	65	61.4
Canoe Brook§§	Maximum	91	93	93	83	88	95	94	87	83	80	77	78	79	86	93	85	81	84	90	91	95	89	84	83	87	94	91	85	80	84	87	86.8
	Minimum	60	58	62	62	51	68	74	61	55	55	50	49	59	63	60	61	48	45	50	65	62	55	51	55	62	68	66	74	62	63	64	59.3
Elizabeth	Maximum	92	92	94	87	82	94	97	89	84	82	77	77	80	84	90	88	80	84	89	88	94	90	90	80	81	90	85	83	83	85	90	86.5
	Minimum	68	66	69	66	59	71	75	62	62	59	58	55	63	66	65	66	58	53	59	74	69	65	65	62	65	71	70	74	68	65	68	65.0
Flemington	Maximum	95	98	95	88	90	96	98	91	85	83	81	82	82	89	96	85	85	89	93	92	95	90	89	89	89	100	93	89	82	87	92	89.9
	Minimum	67	65	67	66	58	71	73	61	62	57	54	56	63	66	65	65	58	53	58	70	69	66	61	62	65	66	72	75	67	65	65	64.1
Jersey City	Maximum	92	93	94	87	88	96	97	79	83	80	78	78	79	86	93	86	83	87	92	93	97	92	84	83	86	94	90	84	81	85	91	87.5
	Minimum	72	73	67	69	65	73	71	64	64	65	62	62	66	68	66	69	62	64	68	73	73	71	67	66	65	70	71	72	72	65	69	67.9
Lambertville	Maximum	90	93	93	84	87	94	94	89	82	81	78	80	77	87	91	83	80	82	89	91	93	89	85	85	87	94	91	86	78	83	88	86.6
	Minimum	67	67	68	65	60	70	74	61	61	57	55	55	63	67	66	62	57	58	63	73	73	66	60	62	64	66	72	71	67	64	65	64.5
Little Falls§§	Maximum	92	96	95	86	89	96	96	86	85	83	80	80	83	85	95	87	83	87	93	93	98	93	90	83	86	95	90	87	81	85	88	88.6
	Minimum	62	63	67	65	56	72	77	60	58	56	52	53	61	67	65	65	54	51	56	68	67	63	60	59	64	67	70	75	66	65	67	62.9
New Brunswick	Maximum	89	92	93	96	87	94	95	98	81	79	77	80	77	87	94	88	82	89	90	92	95	89	87	85	85	93	92	93	88	82	89	88.3
	Minimum	68	67	70	66	59	71	75	62	61	60	57	55	63	67	66	67	58	57	60	73	69	66	64	61	64	68	70	75	69	65	68	65.2
Paterson	Maximum	87	90	92	87	85	92	92	80	81	81	79	77	79	82	91	83	79	83	89	90	93	88	83	79	84	91	88	81	80	....	84	85.0[a]
	Minimum	65	64	68	65	56	72	76	62	59	57	55	55	62	67	67	67	55	55	57	71	68	75	63	59	64	68	69	74	67	....	65	64.2[a]
Plainfield	Maximum	94	96	96	89	89	97	99	79	84	80	79	81	81	87	95	87	84	88	93	93	97	93	85	85	87	97	92	86	80	86	92	88.7
	Minimum	64	65	66	65	57	71	74	62	60	57	55	54	61	66	64	65	57	54	57	73	69	69	63	59	64	70	70	75	70	65	64	64.0
Ridgefield	Maximum	91	93	95	83	87	94	96	76	83	82	80	80	81	84	92	86	81	85	92	91	95	90	85	80	82	92	91	82	79	84	89	86.5
	Minimum	68	68	71	65	59	73	76	61	61	60	56	56	62	68	68	68	58	56	61	74	70	67	64	61	65	68	72	73	69	65	70	65.6
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	90	90	91	82	85	92	92	76	81	79	74	74	77	82	89	84	80	83	88	90	94	89	81	81	82	89	86	79	81	83	87	84.2
	Minimum	73	73	67	69	66	73	71	64	64	66	63	62	67	68	66	69	63	65	69	72	73	72	67	67	65	71	72	72	72	65	69	68.2
The Southern Interior.																																	
Belleplain	Maximum	88	93	93	90	90	94	95	85	84	83	80	82	81	91	93	90	86	89	90	93	98	94	86	....	....	....	87	....	....	....	....	89.0[g]
	Minimum	69	65	65	68	59	71	76	68	61	54	49	48	59	62	65	66	58	51	60	....	67	69	63	....	....	....	76	....	....	....	....	63.0[h]
Bridgeton	Maximum	89	92	94	92	94	97	98	77	84	83	83	82	79	80	92	89	84	93	91	94	98	92	85	84	89	91	89	89	77	85	89	88.2
	Minimum	70	70	70	66	70	75	71	64	60	55	59	62	58	63	59	53	51	57	68	68	71	63	62	67	67	69	73	71	70	69	68	65.1
Burlington	Maximum	92	97	96	94	91	97	98	67	85	82	82	83	82	85	95	84	96	87	91	93	98	91	84	91	88	94	91	91	77	84	91	88.9
	Minimum	72	68	68	67	61	64	67	58	61	60	57	62	60	63	69	58	61	55	63	73	70	65	58	62	67	68	68	75	64	67	67	64.5
Camden	Maximum	95	95	97	91	94	98	98	76	85	84	81	82	78	88	97	88	85	92	92	95	100	93	84	89	89	93	90	90	79	85	92	89.5
	Minimum	74	71	71	68	64	74	75	68	60	60	57	58	67	67	67	68	63	57	66	74	73	74	64	64	66	69	72	75	70	67	70	67.5
Freehold	Maximum	91	95	95	92	88	93	97	93	82	79	78	82	76	89	95	90	83	86	92	94	96	91	89	85	85	94	91	88	78	83	91	88.4
	Minimum	71	67	70	67	68	73	75	64	59	56	53	57	62	65	68	67	58	55	62	71	69	67	64	62	65	68	69	75	70	66	68	65.5
Hammonton	Maximum	88	93	93	91	90	95	95	74	86	82	79	80	77	87	93	88	83	86	89	93	99	94	84	84	87	91	87	88	78	85	90	87.4
	Minimum	69	68	69	66	62	76	68	63	60	55	58	61	61	70	66	61	58	65	73	72	72	64	62	62	69	70	74	72	70	70	68	66.3
Hightstown	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	89	95	91	89	89	87	95	93	87	80	83	89	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	74	70	68	62	62	65	67	71	71	68	66	68	......
Indian Mills	Maximum	91	94	94	89	89	94	96	83	85	81	79	80	75	87	95	86	83	87	90	94	99	92	83	86	81	93	88	90	76	84	90	87.5
	Minimum	68	61	69	66	58	70	74	68	60	56	53	52	62	64	75	75	57	55	59	74	69	68	60	57	66	67	68	74	71	69	69	65.0
Lakewood	Maximum	89	92	94	90	88	96	97	87	80	78	77	81	78	90	92	88	84	87	93	95	96	92	82	84	85	90	89	90	80	83	90	87.6
	Minimum	68	67	68	67	57	72	75	66	60	57	53	50	62	64	69	67	58	53	63	73	67	67	63	57	65	67	69	77	72	67	69	64.8
Moorestown	Maximum	90	93	93	86	85	95	95	75	83	81	80	81	77	86	93	86	82	85	89	92	97	91	84	86	88	91	90	89	79	81	89	86.8
	Minimum	71	70	70	67	63	73	75	66	61	57	55	56	65	68	68	65	60	56	63	73	73	68	64	62	67	70	72	73	69	67	68	66.3
Pemberton	Maximum	91	96	94	91	88	96	97	94	85	82	80	79	78	88	95	92	84	88	90	94	99	94	90	89	88	94	92	91	79	84	91	89.5
	Minimum	70	67	69	67	60	72	75	67	60	57	54	54	62	66	70	67	58	53	63	73	68	67	61	59	67	68	70	72	70	69	69	65.3
Pleasantville§§	Maximum	90	88	89	87	82	89	94	81	79	78	76	78	79	82	87	89	79	87	85	85	93	92	80	81	83	89	86	83	85	84	89	84.8
	Minimum	71	65	69	68	58	71	71	69	63	56	54	49	63	67	71	66	58	55	61	72	68	70	61	58	69	69	70	73	70	71	70	65.4
Runyon	Maximum	95	98	97	88	90	98	99	88	83	82	78	83	79	89	96	91	86	90	94	95	96	94	92	86	87	96	94	86	79	85	92	89.9
	Minimum	63	63	73	64	51	70	75	63	50	51	46	45	56	69	56	63	48	43	54	69	66	61	60	51	65	70	70	73	67	66	66	60.9
Trenton	Maximum	91	96	93	86	87	94	95	76	81	78	77	78	74	86	94	84	79	84	90	92	95	90	83	85	87	94	88	89	77	83	89	86.3
	Minimum	74	71	70	69	64	73	74	63	64	61	58	57	65	68	65	68	61	60	66	70	72	70	64	63	66	69	72	75	69	66	69	67.0
Tuckerton	Maximum	83	90	90	89	87	90	93	85	78	75	75	75	78	80	81	84	85	82	85	84	95	90	88	82	85	86	82	86	84	85	82	84.3
	Minimum	72	75	73	73	72	74	75	69	67	69	68	70	70	68	71	74	69	71	69	72	80	72	70	71	74	74	70	74	69	72	70	71.5
Philadelphia, Pa.	Maximum	92	92	93	89	91	95	94	77	86	85	81	81	76	86	94	87	82	86	89	91	98	92	86	86	88	90	89	86	80	84	90	87.6
	Minimum	76	76	72	71	70	76	74	67	68	67	64	65	69	70	69	70	67	68	71	76	78	76	67	69	67	72	75	77	72	69	74	71.0
The Sea Coast.																																	
Asbury Park	Maximum	82	84	86	86	84	81	97	78	77	75	74	74	77	78	85	87	84	84	83	81	87	86	81	77	76	80	77	82	75	78	88	81.4
	Minimum	74	70	73	70	67	74	72	68	66	67	67	60	68	70	73	72	66	63	68	72	69	71	67	65	66	67	69	70	70	68	72	68.8
Atlantic City	Maximum	88	85	82	82	79	83	87	73	75	75	74	76	79	79	83	91	78	86	81	81	89	88	79	80	79	84	84	78	79	79	86	81.4
	Minimum	73	73	73	72	71	72	71	65	65	66	64	66	70	70	72	71	64	64	72	72	73	74	71	72	72	70	72	73	67	70	69	70.0
Long Branch	Maximum	87	88	93	87	83	91	98	73	78	75	74	75	78	84	91	89	82	88	91	90	96	90	77	80	84	85	85	86	76	78	89	84.5
	Minimum	73	70	71	66	60	72	70	62	63	60	57	54	64	69	67	67	63	56	67	69	69	71	67	65	66	71	72	74	70	68	71	66.6
Sandy Hook	Maximum	85	89	92	84	82	90	94	73	79	74	73	73	75	81	85	85	81	84	90	86	93	88	77	78	81	84	84	82	77	79	87	82.7
	Minimum	73	72	70	69	69	73	68	64	67	66	64	63	68	69	69	71	68	65	69	71	72	71	67	67	65	71	72	72	68	66	71	68.7

[a], [b], [c], etc., Indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	.200	.232	.216	.290	.264	.128	.224	.268	.120	.224	.256	.224	.144	.088	.032	.208	.304	.240	.280	.200	.144	.240	.304	.224	.132	.064	.224	.184	.086	.076	.120	5.940
	Wind movement	8	9	10	22	17	10	22	25	9	12	22	20	20	13	7	20	24	15	20	15	11	14	19	15	21	16	13	26	7	3	8	473
Pleasantville**	Evaporation	.160	.256	.288	.336	.062	.336	.288	*	.288	.304	.256	.256	.070	.126	.350	.288	.288	.320	.240	.224	.286	.320	.272	.244	.126	.304	.240	.124	.170	.160	.176	7.158
	Wind movement	43	24	37	68	26	45	81	73	43	43	61	44	46	36	90	11	51	45	41	83	48	54	36	58	65	63	64	79	60	21	13	1552
Runyon	Evaporation	.210	.240	.240	.210	.240	.240	.240	.180	.170	.240	.240	.180	.080	.090	.120	.260	.240	.240	.240	.286	.240	.220	.240	.180	.118	.210	.210	....	.090	.130	.150	6.173
	Wind movement	8	12	31	12	15	19	46	25	23	16	20	12	22	12	6	25	15	22	15	25	15	15	10	10	19	10	20	8	13	8	22	533

Note: Evaporation determined by measuring amount returued to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

51.05
NNJ

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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

Vol. XXXIX. August, 1934. No. 8.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

Cool and moderately dry weather characterized the month as a whole. It averaged the fifth coolest August during the past fifty years, the coolest, that of 1927, having an average of 67.1 degrees as contrasted with 69.8 degrees for this one. The periods during which temperatures ranged above the daily normals were short, mostly two or three days in length, and the highest points reached by the thermometer being generally about the ninety-degree mark and occurring commonly on the 10th, 11th, 14th and 24th. Cool spells prevailed during the 5th-9th, 12th-13th, 16th-18th, 21st-22d, and 26th-31st, the last named being the most marked. Lowest readings for the month occurred, almost without exception, on the 30th and 31st, and ranged between 33 and 43 degrees over the northern half of the State and between 43 and 49 degrees over the southern half, except along the Coast where they were mostly in the low fifties.

Rainfall varied widely, the range being from over nine inches to less than two. In general, the Southern Interior had the most and the Highlands and Sea Coast the least, the percentages of normal amounts being as follows: The State, 76%; Highlands, 63%; Red Sandstone Plain, 70%; Southern Interior, 91%; Sea Coast, 64%. Rain periods were the 2d-3d, 10th-17th, 24th-26th, and the 28th, with the heaviest general rains coming on the 12th and 13th. Excessive rain occurred at Bridgeton during the night of the 2d-3d. Heavy flood loss, the total not now being available, resulted from the seven-inch rainfall.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 36 stations, was 69.8°, which was 2.0° below normal. The highest temperature was 100° at Burlington on the 10th, and the lowest, 33°, at Layton and Runyon on the 30th. The greatest daily range of temperature was 50° at Phillipsburg on the 8th. The highest monthly mean temperature was 72.3° at Camden, and the lowest, 65.7° at Layton.

The temperature departure from the normal for the year, 1934, to date, by sections, is: The Highlands, +0.2°; Red Sandstone Plain, —0.6°; Southern Interior, —0.8°; Sea Coast, —0.4°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 45 stations, was 3.61 inches, which was 1.14 inches below normal. The greatest monthly precipitation was 9.11 inches, at Bridgeton, and the least, 1.40 inches at Sussex. The greatest amount of precipitation in any 24 consecutive hours was 7.22 inches at Bridgeton on the 2d. The mean of the number of days on which 0.01 inch or more of precipitation fell was 10, or the normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands. —2.60 inches; Red Sandstone Plain, —2.18 inches; Southern Interior, —2.70 inches; Sea Coast, —4.77 inches.

WIND.

The prevailing wind direction was from the southwest. The wind movement averaged 10 miles per hour, which was 1 mile above normal. The highest velocity, sustained for 5 consecutive minutes, was 37 miles per hour from the northeast at Atlantic City on the 12th.

MISCELLANEOUS.

The per cent of possible sunshine was 61, or 5 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.04 inches, or 0.04 inch above normal. The highest reading was 30.46 inches at Ridgefield on the 31st, and the lowest 29.70 inches on the 3d at Long Branch.

The mean stage of the Delaware River at Phillipsburg was 1.3 feet, and the highest 3.7 feet on the 1st. At Trenton the mean stage was 0.6 foot, and the highest 1.9 feet on the 1st.

Thunderstorms occurred on the following dates: 1, 2, 3, 9, 10, 11, 12, 14, 15, 16, 17, 23, 24, 26 and 28. Dense fog was noted on the 11th, 12th, 14th and 15th, mostly occurring along the sea coast and the Delaware River. Light frost occurred at number of stations in the northern section of the State on either the 30th or 31st.

COMPARATIVE DATA FOR AUGUST

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest. monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885........	71.7	−0.1	95	40	6.11	+1.36	10.09	3.47	0	....	....	....	....
1886........	69.5	−2.3	96	42	2.81	−1.94	5.36	1.10	0	....	....	....	....
1887........	70.4	−1.4	94	42	3.76	−0.99	7.34	2.09	0	....	....	....	....
1888........	72.5	+0.7	98	41	6.13	+1.38	10.53	2.55	0	....	....	....	....
1889........	69.6	−2.2	91	45	5.13	+0.38	9.06	1.93	0	....	....	....	...
1890........	71.5	−0.3	99	40	4.90	+0.15	7.51	2.89	0	11	8	15	8
1891........	72.8	+1.0	100	46	5.32	+0.57	8.89	2.58	0	13	8	11	12
1892........	73.4	+1.6	99	46	3.63	−1.12	5.65	0.72	0	9	12	13	6
1893........	72.8	+1.0	98	38	6.52	+1.77	11.94	3.55	0	8	14	11	6
1894........	70.9	−0.9	97	44	2.58	−2.17	9.28	0.15	0	7	13	12	6
1895........	74.2	+2.4	102	34	2.53	−2.22	5.06	**0.02**	0	7	16	12	3
1896........	73.6	+1.8	105	39	1.83	−2.92	**3.27**	0.50	0	7	17	10	4
1897........	71.0	−0.8	91	41	4.39	−0.36	8.69	2.07	0	9	14	12	5
1898........	74.8	+3.0	98	42	5.36	+0.61	9.28	2.70	0	10	12	12	7
1899........	72.3	+0.5	99	39	4.36	−0.39	9.70	2.16	0	9	10	12	9
1900........	**76.3**	+4.5	104	41	2.68	−2.07	4.56	0.70	0	10	15	11	5
1901........	73.8	+2.0	98	44	9.43	+4.68	15.80	4.88	0	11	12	10	9
1902........	70.1	−1.7	93	40	3.91	−0.84	10.67	1.31	0	9	15	13	3
1903........	68.4	−3.4	98	39	6.95	+2.20	14.54	4.30	0	13	10	10	11
1904........	70.8	−1.0	92	37	6.62	+1.87	13.01	2.65	0	9	15	10	6
1905........	71.1	−0.7	95	38	5.72	+0.97	9.88	3.51	0	12	13	10	8
1906........	74.6	+2.8	97	42	5.95	+1.20	**17.91**	2.21	0	13	10	11	10
1907........	70.5	−1.3	96	39	3.45	−1.30	7.61	1.79	0	10	14	12	5
1908........	70.6	−1.2	103	36	5.05	+0.30	9.23	2.43	0	10	11	10	10
1909........	70.2	−1.6	100	34	4.59	−0.16	12.94	1.41	0	6	14	9	8
1910........	70.4	−1.4	92	36	3.78	−0.97	8.46	1.76	0	10	9	10	12
1911........	72.1	+0.3	101	39	8.91	+4.16	14.74	5.31	0	11	10	11	10
1912........	70.0	−1.8	95	35	3.42	−1.33	7.62	1.19	0	10	12	13	6
1913........	71.7	−0.1	100	38	4.06	−0.69	10.21	1.93	0	10	18	9	4
1914........	73.3	+1.5	98	46	3.15	−1.60	6.53	1.04	0	9	13	12	6
1915........	70.9	−0.9	98	41	7.73	+2.98	10.92	4.02	0	13	11	11	9
1916........	73.2	+1.4	100	40	**1.34**	−3.41	4.15	0.27	0	6	20	7	4
1917........	74.0	+2.2	103	42	2.21	−2.54	5.68	0.86	0	8	18	9	4
1918........	74.4	+2.6	**108**	40	1.85	−2.90	4.25	0.34	0	7	18	7	6
1919........	69.9	−1.9	98	38	6.89	+2.14	12.88	3.09	0	13	13	10	8
1920........	72.3	+0.5	94	42	6.10	+1.35	10.60	2.94	0	17	8	11	12
1921........	69.8	−2.0	97	38	4.32	−0.43	8.01	2.05	0	9	18	7	6
1922........	71 2	−0.6	96	39	4.03	−0.72	6.78	2.18	0	12	13	9	9
1923........	70.8	−1.0	98	35	2.44	−2.31	4.81	1.23	0	8	17	8	6
1924........	71.9	+0.1	102	38	4.40	−0.35	9.48	1.82	0	8	18	8	5
1925........	71.0	−0.8	93	35	2.10	−2.65	4.12	0.94	0	7	20	6	5
1926........	72.8	+1.0	101	38	6.58	+1.83	8.84	3.74	0	14	11	9	11
1927........	**67.1**	−4.7	89	37	8.55	+3.80	12.87	2.88	0	12	11	9	11
1928........	74.5	+2.7	99	45	6.72	+1.97	14.26	3.33	0	13	12	8	11
1929........	69.8	−2.0	97	39	2.58	−2.17	4.86	0.88	0	9	16	8	9
1930........	71.1	−0.7	101	34	3.32	−1.43	5.58	1.92	0	6	16	9	6
1931........	73.5	+1.7	101	45	5.10	+0.35	9.61	2.26	0	12	12	8	11
1932........	73.5	+1.7	99	44	2.75	−2.00	7.49	1.00	0	7	20	7	4
1933........	72.7	+0.9	101	45	**10.53**	+5.78	15.15	**6.45**	0	14	12	9	10
1934........	69.8	−2.0	100	**33**	3.61	−1.14	9.11	1.40	0	10	14	8	9
Period.....	71.8	....	108	33	4.75	....	17.91	0.02	0	10	13	11	7

W. B. O. Philadelphia-9-26-34-875.

Climatological Data for August, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	69.4^{h}	−1.4	90	11†	40	30†	35^{b}	2.69	−1.88	0.70	0	10	18	3	10	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	68.4	+0.9	89	2†	34	31	44	3.12	−1.38	0.70	0	12	19	4	8	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	......	......	......	......	......	......	....	1.70	−2.95	0.45	0	6	19	7	5	e.	Brice E. Riker.
Dover	Morris	600	50	67.0	−2.1	86	20	40	31	33	4.24	−0.26	1.19	0	12	8	12	11	......	William C. Harris
Layton	Sussex	480	33	65.7	−2.5	86	14	33	30	38	2.33	−1.76	0.50	0	8	15	2	14	sw.	A. M. Depue.
Long Valley	Morris	520	4	66.7	......	88	10	36	31	38	3.86	......	1.63	0	11	15	5	11	se.	S. N .Dilts.
Newton	Sussex	769	51	67.3	−3.0	88	11	41	30	33	2.19	−2.16	0.53	0	11	10	7	14	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	69.4	−2.3	89	24	36	8	50	4.52	+0.12	2.91	0	10	15	10	6	......	Town Engineer.
Sussex	Sussex	442	39	......	......	......	......	......	......	....	1.40	−2.60	0.46	0	6	....	....	....	......	A. J. W. Mowatt
Means and extremes	......	......	....	67.7	−1.7	90	11†	33	30	50	2.89	−1.67	2.91	0	10	15	7	9	sw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	67.6	−2.5	88	11	39	31	36	3.78	−0.91	1.67	.....	10	14	1	16	ne.	John Kline.
Canoe Brook	Essex	173	4	67.4	......	89	11	35	30	41	4.84	......	2.15	......	11	15	7	9	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30	......	......	......	......	......	......	....	4.71	+0.06	1.94	......	11	11	8	12	......	Paul Molitor. Sr.
Elizabeth	Union	45	55	71.4	−1.8	95	11	44	31	37	2.22	−2.11	0.98	0	8	18	5	8	se.	Union County Park Comm.
Flemington	Hunterdon	140	§48	71.0	−1.3	90	3†	44	31	37	4.98	+0.46	2.11	0	13	16	5	10	w.	Hiram E. Deats.
Jersey City	Hudson	10	36	71.3	−2.3	89	11	51	30	24	1.75	−2.58	0.70	0	10	13	8	10	s.	S. K. Pearson.
Lambertville	Hunterdon	430	47	69.2	−2.8	87	24	43	30	35	4.62	−0.18	0.90	0	10	17	1	9	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	69.9	−1.3	91	11	42	30†	38	3.03	−1.93	1.10	0	9	15	8	8	w.	Passaic Valley Water Co
New Brunswick	Middlesex	110	81	70.2	−1.8	87	11†	44	30†	30	3.05	−2.35	1.04	0	13	13	12	6	w.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	......	......	......	......	......	......	....	2.73	−1.82	1.00	0	10	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	68.2^{a}	−4.0	87	11	43	31	31	2.82	−1.81	0.88	0	12	16	8	7	w.	William H. Meyer.
Plainfield	Union	120	46	70.0	−1.4	90	11	43	31	36	3.29	−1.81	1.24	0	9	10	10	11	s.	S. K .Pearson.
Ridgefield	Bergen	80	17	69.7	−1.0	89	11†	45	31	31	2.84	−2.07	1.20	0	10	13	8	10	ne.	George P. Kirsten.
Somerville	Somerset	70	51	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	......	......	......	......	......	......	....	2.15	−2.07	0.80	......	10	....	....	....	......	Hackensack Water Co.
New York, N. Y.	......	314	64	70.4	−2.7	86	11	52	30	21	1.74	−2.59	0.78	0	9	12	8	11	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	69.6	−1.8	95	11	35	30	41	3.34	−1.47	2.15	0	10	14	7	10	w.	
The Southern Interior.																				
Belleplain	Cape May	30	40	......	......	......	......	......	......	....	5.79	+1.19	......	......	....	....	....	....	......	A. F. Waldron.
Bridgeton	Cumberland	30	51	71.1	−3.5	91	15	47	30†	30	9.11	+4.44	7.22	0	9	20	5	6	sw.	Bennett K. Matlack
Burlington	Burlington	12	§48	72.2	−2.2	100	10	45	31	36	3.64	−2.14	1.19	0	10	14	8	9	sw.	Public Service Power Co.
Camden	Camden	20	2	72.3	......	90	10†	47	31	32	4.48	......	1.12	0	12	10	7	14	sw.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	70.8	......	91	10	43	30	31	2.62	−1.97	0.65	0	9	16	11	4	sw.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	71.9	......	89	14†	47	30	31	5.81	+0.93	2.20	0	8	14	10	7	se.	Geo. W. Lobley.
Hightstown	Mercer	110	41	70.0	−1.9	88	10	43	31	33	2.25	−2.77	0.82	0	9	18	5	8	sw.	Braun Bros.
Indian Mills‡‡	Burlington	76	45	70.4	−2.0	89	10	42	30	35	7.66	+2.13	2.65	0	6	10	11	10	nw.	James M. Armstrong.
Lakewood	Ocean	54	30	70.2	−0.7	91	10	43	31	31	1.55	−3.64	0.30	0	8	12	7	12	sw.	R. W. Holman.
Moorestown	Burlington	62	71	70.2	−2.3	88	24	46	31	28	3.76	−1.61	1.04	0	11	10	12	9	n.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	27	......	......	......	......	......	......	....	6.08	+1.56	2.00	0	10	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	71.6	......	90	24	43	31	34	2.71	......	0.64	0	10	16	5	10	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	70.2^{a}	......	89	15	43	31	29	6.03	+1.37	2.30	......	10	15	8	8	ne.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	......	......	......	......	......	......	....	2.17	......	0.60	0	7	17	6	8	s.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	69.3	......	91	2	33	30	44	2.05	−3.27	0.67	......	8	15	13	3	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	70.5	−2.5	88	14	49	30	26	2.59	−2.16	0.76	0	11	9	8	14	s.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	......	......	......	......	......	......	....	2.92	......	0.98	0	13	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	41	71.2	−1.2	89	26	51	31	23	5.36	+0.06	1.81	0	11	18	5	8	n.	John H. Brown.
Philadelphia, Pa	......	114	63	73.2	−1.6	89	14	54	30	21	4.29	−0.33	1.51	0	12	10	5	16	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	70.8	−2.0	100	10	33	30	44	4.27	−0.42	7.22	0	10	14	8	9	sw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	70.4	−1.1	85	24	55	30	19	2.63	−2.18	1.06	0	9	8	10	13	s.	S. W. Triano.
Atlantic City	Atlantic	52	61	71.8	−0.7	89	20	53	30	23	5.00	+0.51	2.45	0	10	7	9	15	s.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	69.6	−1.2	89	10†	47	31	24	2.94	−2.54	1.50	0	8	12	9	10	s.	William D. Martin.
Sandy Hook	Monmouth	22	36	70.9	−1.6	87	10	56	30	18	2.09	−2.89	1.16	0	8	12	7	12	s.	U. S. Weather Bureau.
Means and extremes	......	......	....	70.7	−1.1	89	10†	47	31	24	3.16	−1.78	2.45	0	9	10	9	12	s.	
For the State	......	......	....	69.8	−2.0	100	10	33	30	50	3.61	−1.14	7.22	0	10	14	8	9	sw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for August, 1934

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley:																																	
Belvidere	Delaware			.30						.20		.45	.70	.35	.05		.25							.14	.10				.15				2.69
Charlotteburg	Passaic	T.	.70								.14	.04	.43	.16	.20		.10							.22	.62	.17		.17	.17				3.12
Culvers Lake	Delaware			.15					T.				.30			.35	.35						.10		.45	T.							1.70
Dover	Passaic	.03	*	.79						.29		.29	1.19	.05		.05	.84							.04	.52				.15				4.24
Layton	Delaware		.12	.06									.40	.21			.50	T.						.48	.45				.11				2.33
Long Valley	Morris	.12	.25	.36						.05			1.63	.48		.10	.63							.05	.15	.04							3.86
Newton	Delaware		.02	.27						T.	.03	.03	.53	.22	.03		.45							.38	.06	T			.17				2.19
Phillipsburg	...do		.12	.15						.39	T.	.16	2.91	.16	.03		.25	T.					T		.30				.05				4.52
Sussex	Hudson		T.	.02						T.			.28	.13			.46								.46				.05				1.40
The Red Sandstone Plain.																																	
Boonton‖	Passaic	.04		.42							.27	.16		1.67	.04	T.	.41	.18							T.	.33				.26			3.78
Canoe Brook‖	Essex		.04	.20							.35	.19		1.26	.03		2.15	.19							.27	.05			.11				4.84
Chatham‖	...do	.07		.24							.36	.27		1.12	.05		1.94	.22							.07	.25				.12			4.71
Elizabeth	Coast	T.	.04	.07						T.		.19	.98	.26	T.	.08	.34								T.				.26				2.22
Flemington	Raritan	.01	2.11	.07						.53	.07	.13	.77	.51	.08		.31	T.							.27	.01			.11				4.98
Jersey City	Coast		.13	.05						T.	T.	.10	.70	.10	.01	.04	.40								.02				.20				1.75
Lambertville	Delaware		.66	.24						.38		.57	.83	.48			.88								.27	.02			.29				4.62
Little Falls.‖	Passaic			.20							.25	.11		1.10			.89	.11							.18	.03				.16			3.03
New Brunswick	Raritan		.01	.08							.02	.70	1.04	.41	.03	.01	.39	T.							.04	.01	.01		.30				3.05
New Milford‖	Hackensack			.09							.11	.08		1.00	.11	.36	.27	.22								.31				.18			2.73
Paterson	Passaic	.08	T	.11							.22	.04	.34	.88	.07	.36	.31								.22	.04			.15				2.82
Plainfield	Raritan		.28							.20		.18	1.24	.14		.10	.53								.26				.36				3.29
Ridgefield**	Hackensack	T.	.10	.08						T.	.02	.09		1.20		.17	.94								.09				.15				2.84
Somerville	Raritan																																....
Woodcliff Lake‖	Hackensack			.10							.03	.04	.04	.80	.20		.02	.21								.42				.29			2.15
New York, N. Y***	Coast		.12	.05						T.	T.	.09	.77	.02	T.	.04	.41								.03				.21				1.74
The Southern Interior.																																	
Belleplain	Tuckahoe																																....
Bridgeton	Delaware	.09	7.22	.03						T.		.02	.06			.69	.75							T.	.09				.16				9.11
Burlington	Delaware		.25	.14						.07	T.	.50	.16	1.19			.39								.09	.70			.15				3.64
Camden***	..do		.69	.22						.03		.20	.79	T.	.53	.11	.47							.02	.40	.72			.30				4.48
Freehold	Raritan			.14									.44	.40	.09	.06	.26	.03							.55				.65				2.62
Hammonton	Mullica	.14	2.14									.10	.21			.31	2.20									.40				.31			5.81
Hightstown	Raritan		T.	.12						T.	.01	.02	.13	.82	T.	.05	.27							T.	T.	.53			.30				2.25
Indian Mills	Mullica		.54	2.11								1.73	1.12				.90									1.26							7.66
Lakewood	Metedeconk		.14	.28									.25	.25		.06	.30							T.		.25			.02				1.55
Moorestown‖	Delaware		T.	.58	.04							T.		1.00	.01	.29	.08	.47							.05	1.04			.02	.18			3.76
Northfield	Coast		.60	1.30								.76	.10	.09	T.		2.00							.05	.02	1.08			.08				6.08
Pemberton	Delaware		.03	.61								.04	.01	.64	.03	.15	.64	.03											.53				2.71
Pleasantville‖	Coast		.12	1.45									.73	.11			1.02	1.28						.15	.01	1.12				.04			6.03
Port Norris	Maurice		.30										.12	.39			.60	.46						T.		.20			.10				2.17
Runyon	Coast			.06								.05	.62	.49	.05		.45									.08			.25				2.05
Trenton***	Delaware		.06	.19						.05		.06	.74	.15	T.	.22	.24			T.				.04	T.	.62			.22				2.59
Trenton No. 2‖	...do		T.	.33							.31	.07	T.	.98	.14	.02	.19	.24						.04	.01	.19			.28	.12			2.92
Tuckerton	Coast		.14	.91						.17		.11	.23	.41			.36	1.81										.51	.42	.29			5.36
Phila., Pa***	Delaware		.43	.14						.03	T.	.26	1.51	T.	.64	.08	.47							.05	.40	.12			.16				4.29
The Sea Coast.																																	
Asbury Park	Coast		.20	.07						T.			1.06	.16	T.	.22	.26	T.						.01		T.			.45	T.	.20		2.63
Atlantic City***	...do		1.28	.06								.46	.25	T.		1.07	1.38							.01	.02	.41			.06				5.00
Long Branch**	...do		.07	.04								T.	1.50	.08		.02	.27							T.		.70			.26				2.94
Sandy Hook***	...do		.13	.03								T.	1.16	.04	.01	T.	.26							T.		.03			.43				2.09

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.05	30.44	31	29.81	20	13.0	37	ne.	12	80	68	77	57
Camden						7.0	21	s.	2	78	58	73	
Long Branch	30.03	30.45	31	29.70	3					78	63	70	62
New York, N. Y	30.04	30.45	31	29.72	3	12.2	34	nw.	5	77	58	68	60
Philadelphia, Pa	30.05	30.44	31	29.77	3	10.7	31	e.	12	74	56	64	51
Ridgefield	30.04	30.46	31	29.72	3								
Sandy Hook	30.04	30.43	31	29.72	3	12.1	30	ne.	12	77	64	74	60
Trenton	30.04	30.43	31	29.75	3	8.3	24	w	3	78	55	68	64

Daily Temperatures for August, 1934

Stations		1	2	3	4	6	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	....	....	....	....	....	....	....	....	80	85	90	75	70	87	84	78	74	83	85	87	85	85	83	90	81	82	85	71	73	71	70	80.6^{h}
	Minimum	....	....	....	....	....	....	....	....	64	70	70	61	58	63	65	61	58	55	62	69	50	51	61	64	65	56	50	65	51	40	40	58.2^{h}
Charlotteburg	Maximum	86	89	85	87	84	82	84	87	85	87	86	87	78	83	87	80	74	82	89	85	77	82	83	87	87	77	84	79	82	75	74	83.0
	Minimum	61	48	67	63	57	44	47	43	52	65	67	59	54	60	62	68	56	50	55	67	47	42	61	57	64	55	46	42	49	39	34	53.9
Dover	Maximum	80	76	84	80	77	78	81	84	79	82	84	72	64	84	78	73	70	79	81	86	73	79	76	83	76	74	78	70	69	69	71	77.1
	Minimum	62	53	67	64	51	48	48	66	58	67	70	59	56	62	65	58	67	56	62	61	50	48	62	63	65	59	51	53	51	43	40	56.9
Layton	Maximum	80	74	85	80	76	78	83	84	78	85	83	77	67	86	83	70	75	81	83	80	75	80	78	85	76	75	80	65	70	70	74	77.9
	Minimum	57	51	62	64	60	41	61	52	57	63	63	58	55	61	61	56	56	52	52	60	40	44	57	57	62	51	45	51	51	33	36	53.5
Long Valley	Maximum	81	75	83	78	75	78	82	83	80	88	82	73	65	80	82	78	75	82	80	80	78	80	79	87	78	77	81	70	70	71	74	78.2
	Minimum	60	60	51	60	57	46	45	51	57	66	68	57	51	61	64	58	56	54	57	54	46	60	63	60	64	59	47	49	50	44	36	55.2
Newton	Maximum	80	77	85	81	76	77	84	85	82	84	88	80	68	84	81	73	71	81	82	83	73	81	78	85	78	78	81	66	71	71	75	78.7
	Minimum	60	55	65	60	62	46	51	56	58	64	68	57	54	60	63	55	55	54	51	61	48	50	60	61	63	55	50	53	64	41	43	65.9
Phillipsburg	Maximum	85	79	88	85	83	82	86	86	81	84	87	77	66	85	86	74	74	81	83	85	77	82	81	89	79	79	83	70	73	74	76	80.6
	Minimum	63	57	66	64	59	50	50	36	66	69	71	60	69	63	67	62	59	56	63	68	62	51	64	67	67	68	50	54	51	44	42	58.3
Sussex	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
The Red Sandstone Plain.																																	
Boonton§§	Maximum	81	81	85	81	77	80	83	83	82	83	88	74	70	85	81	67	75	80	81	82	74	80	80	85	79	78	80	71	71	73	75	78.9
	Minimum	60	53	60	68	58	44	48	54	55	63	70	68	57	58	66	61	58	55	57	62	46	48	54	60	66	69	48	62	52	42	39	56.2
Canoe Brook§§	Maximum	82	79	85	81	78	80	85	83	84	87	89	75	70	86	80	70	75	82	84	82	80	82	81	88	78	78	81	72	72	73	75	79.9
	Minimum	57	50	65	60	56	39	47	51	54	66	69	66	56	60	65	68	57	51	55	58	44	45	67	68	66	59	44	50	45	35	40	54.9
Elizabeth	Maximum	90	86	87	90	85	86	88	88	90	91	96	87	72	92	86	81	84	88	84	84	75	81	77	88	81	78	80	73	71	67	75	83.2
	Minimum	65	58	69	67	62	49	54	68	60	69	71	59	56	63	67	62	60	58	60	68	52	61	61	65	69	65	52	55	52	45	44	59.6
Flemington	Maximum	87	82	90	85	81	84	87	88	84	85	88	83	68	90	83	81	78	84	85	87	82	85	85	89	80	80	86	77	74	73	78	82.9
	Minimum	63	56	66	66	62	51	52	51	62	69	70	61	58	64	69	61	59	57	62	68	49	51	64	65	69	61	62	54	52	45	44	59.1
Jersey City	Maximum	84	78	86	84	80	80	83	83	81	85	89	77	67	86	81	67	74	80	83	85	76	82	82	86	78	80	85	70	74	73	76	79.8
	Minimum	67	68	70	69	63	58	62	63	65	70	70	60	58	65	68	63	60	61	64	63	56	68	64	68	70	65	61	57	56	61	65	62.8
Lambertville	Maximum	83	78	84	82	80	80	86	86	85	85	84	78	61	86	82	70	73	82	83	82	74	82	84	87	77	77	82	71	76	70	76	79.5
	Minimum	65	60	65	66	60	50	51	57	61	69	69	59	56	63	68	61	58	58	63	53	49	54	65	66	69	60	55	55	50	43	45	58.8
Little Falls§§	Maximum	85	82	87	84	81	83	87	85	83	87	91	77	72	90	83	70	77	83	84	85	79	84	82	89	80	80	85	73	74	75	78	81.8
	Minimum	63	55	66	65	61	46	51	57	57	67	71	68	57	60	65	59	58	56	59	69	49	59	61	51	69	61	60	54	61	42	42	58.0
New Brunswick	Maximum	84	80	86	84	80	80	83	84	85	86	87	81	66	85	81	75	75	81	83	82	80	82	83	87	83	77	82	78	71	71	74	80.5
	Minimum	65	59	68	66	64	50	55	67	69	69	70	58	57	63	68	62	59	58	61	68	58	53	63	64	69	65	53	56	53	44	44	59.8
Paterson	Maximum	79	79	84	79	77	75	81	81	81	84	87	76	68	82	79	74	73	79	81	80	72	81	....	85	82	76	80	69	69	69	73	77.8^{a}
	Minimum	63	56	72	66	64	48	52	57	58	68	71	62	58	63	63	59	58	58	59	67	50	50	....	61	68	60	51	55	52	45	43	58.6^{a}
Plainfield	Maximum	86	78	88	85	82	83	87	86	84	86	90	78	67	87	82	65	75	82	85	87	78	84	85	87	79	80	86	71	75	77	77	81.4
	Minimum	63	57	65	65	62	47	51	56	59	67	70	60	57	63	68	63	57	66	60	65	49	50	62	64	68	64	50	55	52	46	43	68.5
Ridgefield	Maximum	82	80	88	83	77	77	84	84	84	87	89	69	67	87	80	65	75	81	85	83	78	83	80	89	78	80	83	69	72	72	76	79.6
	Minimum	64	59	70	68	65	60	55	61	61	71	72	59	57	62	65	59	69	59	63	60	51	55	62	66	70	60	54	56	50	46	45	59.8
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	81	78	83	81	77	77	79	79	77	83	86	73	67	84	80	68	73	78	81	82	74	78	78	85	76	78	83	70	69	69	73	77.4
	Minimum	67	70	70	69	63	58	63	64	66	71	71	60	58	65	68	62	60	62	65	63	57	59	64	69	70	65	62	57	56	52	56	63.3
The Southern Interior.																																	
Belleplain	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	84	80	86	82	84	80	80	82	85	88	83	74	74	89	91	78	73	81	84	83	76	80	84	90	84	75	84	75	75	74	77	81.1
	Minimum	64	67	67	65	56	55	61	63	69	74	71	60	61	69	65	59	61	56	60	64	57	65	67	70	66	55	61	54	48	47	47	61.1
Burlington	Maximum	80	92	88	85	88	90	84	84	90	100	88	82	70	90	85	80	71	82	86	88	78	86	86	87	90	80	86	85	74	72	76	84.0
	Minimum	58	60	68	68	64	54	63	56	62	69	71	62	59	65	72	67	52	62	62	68	54	54	64	64	67	65	53	64	54	49	45	60.5
Camden	Maximum	86	85	87	85	85	81	86	85	89	90	87	73	70	88	86	73	76	82	86	86	78	86	85	90	82	78	84	71	74	73	76	82.0
	Minimum	69	63	69	69	61	57	54	58	63	72	71	61	59	67	72	63	60	60	64	65	56	59	67	70	72	63	56	66	56	51	47	62.6
Freehold	Maximum	89	84	87	84	82	79	85	85	89	91	88	80	67	85	84	77	76	80	86	82	81	76	83	90	85	76	76	75	70	72	74	81.2
	Minimum	65	59	68	67	64	48	54	48	59	69	71	60	69	63	70	65	60	56	60	67	67	65	65	65	70	66	53	59	55	43	45	60.6
Hammonton	Maximum	84	80	85	83	84	80	81	83	85	88	87	73	71	89	88	89	73	75	82	83	86	75	82	84	88	86	75	83	71	74	72	81.3
	Minimum	64	67	67	64	55	56	59	63	71	73	72	60	61	69	70	67	60	57	62	68	55	57	64	68	71	66	62	60	54	47	49	62.5
Hightstown	Maximum	83	82	86	82	81	79	82	85	85	88	85	78	66	87	82	79	76	82	85	79	77	84	81	83	82	75	83	72	72	72	75	80.3
	Minimum	65	62	63	66	62	48	51	54	58	71	70	65	58	64	69	65	59	55	62	67	51	51	63	67	70	62	54	57	53	45	43	59.8
Indian Mills	Maximum	84	82	86	82	82	81	82	83	86	89	85	74	70	88	87	78	76	81	85	85	77	82	87	88	84	78	85	72	71	71	75	81.2
	Minimum	66	58	68	65	61	51	51	54	60	69	72	63	60	66	72	67	60	63	58	67	50	62	62	66	71	65	50	55	53	42	43	69.6
Lakewood	Maximum	85	82	87	85	82	78	79	80	86	91	86	80	68	82	81	76	75	77	84	84	80	82	83	89	85	81	80	75	72	60	71	80.5
	Minimum	67	57	70	68	62	49	56	53	55	70	72	63	60	64	70	67	60	53	60	67	51	52	64	63	72	64	63	55	53	45	43	69.9
Moorestown	Maximum	82	82	85	81	82	79	82	83	86	87	86	72	69	86	84	71	74	80	83	82	74	81	83	88	79	75	81	72	72	71	74	79.5
	Minimum	65	62	70	68	59	53	65	57	62	71	72	61	60	66	70	62	61	68	63	61	55	56	66	68	69	62	55	60	61	47	46	61.0
Pemberton	Maximum	86	83	86	84	82	81	85	85	87	89	89	77	69	87	85	80	77	83	86	85	82	83	85	90	86	80	84	79	75	71	77	82.5
	Minimum	67	60	70	67	64	62	54	65	60	70	71	64	60	65	72	69	60	55	60	67	53	65	63	66	71	63	52	68	64	45	43	60.8
Pleasantville§§	Maximum	85	83	83	....	84	75	78	80	82	86	85	76	74	83	89	75	72	77	81	85	75	78	82	88	88	78	82	77	72	70	72	79.8^{a}
	Minimum	68	59	70	63	....	52	49	55	57	71	70	71	63	65	71	66	61	53	59	68	51	54	66	70	70	66	54	57	64	44	43	60.7^{a}
Runyon	Maximum	85	91	87	87	87	82	87	85	86	89	87	84	68	88	84	80	87	85	86	86	80	86	87	90	86	84	85	86	76	76	75	84.3
	Minimum	66	51	66	61	66	39	44	41	52	68	70	60	53	63	68	63	69	54	60	61	43	44	54	60	61	60	43	46	51	33	34	54.3
Trenton	Maximum	83	80	85	82	81	79	82	82	84	86	85	75	67	88	82	70	74	81	84	83	75	81	84	88	78	75	83	73	71	71	73	79.5
	Minimum	67	64	67	69	64	54	56	60	62	71	70	60	57	65	69	62	59	61	63	63	56	58	66	66	69	62	57	57	63	49	50	61.6
Tuckerton	Maximum	80	80	78	85	80	80	80	75	80	80	80	75	76	80	78	75	77	78	75	82	75	80	75	80	86	89	80	75	74	70	71	78.3
	Minimum	70	71	69	71	72	57	58	60	70	71	70	60	61	69	68	62	61	60	60	70	57	60	70	70	70	72	69	63	54	62	51	64.2
Philadelphia, Pa	Maximum	83	81	84	82	82	80	82	83	85	86	87	77	69	89	87	74	76	80	83	83	74	80	84	87	81	77	82	73	73	73	77	80.5
	Minimum	70	70	70	72	70	62	64	67	68	74	73	62	61	68	72	63	62	65	66	67	62	63	70	71	71	66	64	63	67	54	56	65.9
The Sea Coast.																																	
Asbury Park	Maximum	80	76	83	79	78	74	74	77	75	81	76	74	68	78	76	74	71	73	82	81	77	75	80	85	82	76	79	75	70	69	70	76.4
	Minimum	70	65	70	69	65	56	60	63	63	68	67	64	64	68	67	70	67	61	63	69	60	62	66	69	71	61	62	61	60	65	69	64.4
Atlantic City	Maximum	85	80	83	84	86	74	78	79	80	78	79	75	72	80	83	75	72	75	78	89	70	76	79	81	84	77	80	75	72	70	71	78.1
	Minimum	70	68	69	70	67	59	62	69	70	69	68	64	64	71	69	68	64	62	69	66	60	68	69	72	73	66	61	64	57	53	64	65.6
Long Branch	Maximum	84	77	86	84	81	74	77	77	80	89	83	72	66	82	78	72	74	75	84	83	69	79	82	89	79	77	78	69	71	70	71	77.8
	Minimum	68	61	70	66	63	54	57	60	62	71	72	60	60	64	70	64	60	56	63	62	65	55	65	70	71	61	57	60	56	48	47	61.6
Sandy Hook	Maximum	81	78	84	81	80	76	78	77	76	87	83	71	67	81	75	69	74	74	82	81	70	77	81	85	77	77	80	68	71	70	71	76.8
	Minimum	69	69	71	71	67	61	65	66	65	72	71	62	60	66	67	63	62	63	65	66	60	62	67	70	71	67	62	60	60	66	59	65.0

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook	Evaporation	.176	.264	.032	.184	.256	.280	.200	.216	.240	.070	.070	.136	.044	.022	.176	.160	.014	.080	.144	.120	.264	.192	.160	....	.074	.224	.128	.190	.064	.128	1.44	4.590
	Wind movement	16	14	24	20	24	23	13	18	25	16	8	12	31	4	7	10	9	5	10	19	18	13	19	13	15	6	6	10	6	7	9	424
Pleasantville**	Evaporation	.296	.282	.128	*	.304	.240	.208	.256	.240	.272	.068	*	.222	.048	.236	.128	.176	.240	.144	.320	.266	.192	.160	.186	*	.064	.240	*	.120	.160	.192	6.358
	Wind movement	41	41	87	19	....	40	83	34	34	71	84	28	49	56	33	32	68	30	28	60	41	36	35	56	63	12	21	33	28	34	38	1316
Runyon	Evaporation	.210	.120	.150	.240	.240	.225	.220	.210	.150	.120	.060	.108	.074	.050	.120	.046	.120	.120	.120	.180	.210	.210	.240	.120	.240	.080	.120	.040	.180	.120	.120	4.553
	Wind movement	11	17	35	26	29	17	23	24	23	23	17	44	38	14	12	30	22	22	11	34	19	22	17	30	17	13	15	14	12	12	14	656

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day.

1.05
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DEC 5 1934
UNIVERSITY OF ILLINOIS

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. SEPTEMBER, 1934. No. 9.

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GENERAL SUMMARY.

The outstanding characteristic of the weather for the month was its wetness. The average amount of rain for the State, as a whole, is the greatest on record for September. In 1889, 8.36 inches fell and set a record that was to endure until this year when it was broken by a fall of 9.00 inches. About one-half of the stations recorded ten inches, or more, but the great majority of them were in the northern half of the State. The various districts experienced the following percentages of normal: The Highlands, 250%; Red Sandstone Plain, 284%; Southern Interior, 238%; Sea Coast, 239%; State, 253%. The heaviest general rains came during the 7th-8th, 17th, and 29th-30th. There were only about twelve to thirteen really dry days during the month.

Temperatures ranged mostly above the daily normals, there being only about eight to ten days, on the average, with below-normal means. The month as a whole, however, was not markedly warm, the average being only a little more than a degree in excess, thus indicating the rather even character of the temperature variation. Highest temperatures occurred during the first decade, with very few exceptions, and were mostly in the eighties, while the lowest were in the low forties and high thirties, and were recorded on the 1st and 19th, with a few on the 28th. No freezing temperatures were reported, but the first light frosts of the season made their appearance at a few stations in the extreme north portion.

No damage by wind or hail was reported, but minor damage from floods, resulting from the breaking of dams in small creeks, occurred.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 35 stations, was 67.3°, which was 1.4° above normal. The highest temperature was 91° at Camden on the 9th, and the lowest, 35°, at Charlotteburg and Runyon on the 1st. The greatest daily range of temperature was 45° at Runyon on the 5th. The highest monthly mean temperature was 69.6° at Atlantic City, and the lowest, 63.8° at Layton.

The temperature departure from the normal for the year, 1934, to date, by sections, is: The Highlands, +0.4°; Red Sandstone Plain, —0.4°; Southern Interior, —0.6°; Sea Coast, —0.2°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 44 stations, was 9.00 inches, which was 5.44 inches above normal. The greatest monthly precipitation was 13.52 inches, at Little Falls, and the least, 4.02 inches at Camden. The greatest amount of precipitation in any 24 consecutive hours was 6.56 inches at Northfield on the 8th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 13, or 5 more than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, +3.31 inches; Red Sandstone Plain, +4.50 inches; Southern Interior, +1.83 inches; Sea Coast, —0.46 inch.

WIND.

The prevailing wind direction was from the east. The wind movement averaged 11 miles per hour, which was 1 mile below normal. The highest velocity, sustained for 5 consecutive minutes, was 65 miles per hour from the north at Sandy Hook on the 8th.

MISCELLANEOUS.

The per cent of possible sunshine was 48, or 20 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.09 inches, or 0.02 inch above normal. The highest reading was 30.49 inches at Sandy Hook on the 1st, and the lowest 29.54 inches at Sandy Hook on the 8th.

The mean stage of the Delaware River at Phillipsburg was 3.1 feet, and the highest 9.8 feet on the 18th. At Trenton the mean stage was 1.9 feet, and the highest 4.6 on the 19th.

Thunderstorms occurred on the following dates: 6, 7, 8, 10, 11, 17, 23, 24, 27, 29 and 30. Dense fog occurred at scattered sections of the State on the 3d and 7th and quite generally on the 26th. Light frost occurred at a few stations in the extreme northern part of the State. Moderate hail was noted at Elizabeth on the 10th.

COMPARATIVE DATA FOR SEPTEMBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885........	64.2	−1.7	93	38	0.83	−2.73	1.69	0.25	0	....	....	....	....
1886........	66.9	+1.0	95	36	1.13	−2.43	1.76	0.86	0	....	....	....	....
1887........	61.6	−4.3	90	30	3.66	+0.10	6.25	1.62	0	7	....	....	....
1888........	63.1	−2.8	84	29	7.09	+3.53	10.65	3.75	0	12	....	....	....
1889........	64.8	−1.1	90	34	8.36	+4 80	13.13	3.17	0	14	....	....	....
1890........	64.4	−1.5	91	33	4.75	+1.19	8.61	2.59	0	10	10	10	10
1891........	68.7	+2.8	95	38	2.46	−1.10	5.91	0.90	0	6	16	9	5
1892........	64.2	−1.7	90	33	1.81	−1.75	3.78	1.02	0	6	15	11	4
1893........	62.7	+3.2	90	31	3.20	−0.36	5.38	1.93	0	8	12	10	8
1894........	68.8	+2.9	97	31	7.46	+3.90	11.65	3.69	0	8	10	10	10
1895........	69.7	+3.8	**109**	29	1.07	−2.49	2.71	0.22	0	5	17	10	3
1896........	65.1	−0.8	95	30	4.37	+0.81	8.74	2.26	0	5	19	7	4
1897........	65.5	−0.4	99	30	1.65	−1.91	3.97	0.21	0	5	19	7	4
1898........	68.6	+2.7	100	31	2.00	−1.56	3.87	0.65	0	6	17	8	5
1899........	64.4	−1.5	93	30	5.88	+2.32	9.61	2.88	0	9	15	9	6
1900........	69.9	+4.0	98	32	2.86	−0.70	7.37	1.09	0	6	14	10	6
1901........	66.8	+0.9	94	29	3.38	−0.18	6.82	1.63	0	10	15	9	6
1902........	64.6	−1.3	93	30	5.65	+2.09	8.95	3.11	0	13	11	7	12
1903........	65.0	−0.9	92	29	3.34	−0.22	7.10	1.39	0	7	17	8	5
1904........	64.8	−1.1	93	**23**	4.79	+1.23	10.08	0.89	0	7	14	10	6
1905........	65.4	−0.5	90	28	5.23	+1.67	9.18	2.87	0	8	16	7	7
1906........	68.9	+3.0	94	33	2.19	−1.37	4.66	0.75	0	7	15	9	6
1907........	67.1	+1.2	92	31	8.08	+4.52	12.95	3.55	0	14	10	8	12
1908........	65.7	−0.2	90	29	2.09	−1.47	4.13	0.95	0	3	11	10	9
1909........	64.5	−1.4	89	30	3.30	−0.26	4.58	2.08	0	8	11	10	9
1910..	67.3	+1.4	97	32	2.39	−1.17	3.97	1.01	0	6	12	10	8
1911........	66.4	+0.5	90	30	2.88	−0.68	5.33	1.08	0	9	10	12	8
1912........	65.9	0.0	87	28	4.47	+0.91	6.76	2.68	0	10	12	7	11
1913........	64.4	−1.5	96	27	3.87	+0.31	6.55	1.56	0	9	13	8	9
1914........	64.0	−1.9	99	24	**0.37**	−3.19	1.64	**0.14**	0	3	21	6	3
1915........	68.5	+2.6	97	30	2.08	−1.48	4.46	0.55	0	5	17	9	4
1916........	65.2	−0.7	98	31	2.84	−0.72	5.29	1.29	0	6	20	7	3
1917........	**61.5**	−4.4	87	27	2.74	−0.82	6.13	0.47	0	6	16	7	7
1918........	62.2	−3.7	90	29	3.84	+0.28	6.00	2.66	0	9	14	8	8
1919........	65.8	−0.1	96	32	3.26	−0.30	6.28	1.04	0	8	16	6	8
1920........	66.8	+0.9	90	30	3.87	+0.31	8.53	1.67	0	7	17	8	5
1921........	70.2	+4.3	99	36	2.35	−1.21	5.04	0.80	0	8	15	8	7
1922........	66.7	+0.8	95	27	2.26	−1.30	5.22	0.59	0	4	19	5	6
1923........	67.0	+1.1	90	28	3.78	+0.22	6.26	2.24	0	7	14	8	8
1924........	62.2	−3.7	99	29	5.42	+1.86	8.44	2.47	0	10	13	8	9
1925........	67.8	+1.9	96	25	2.92	−0.64	5.81	0.64	0	7	11	11	8
1926........	64.5	−1.4	93	32	4.18	+0.62	7.09	1.53	0	10	14	6	10
1927........	65.6	−0.3	97	29	2.66	−0.90	5.03	0.65	0	5	19	6	5
1928........	62.6	−3.3	90	29	4.52	+0.96	9.62	1.54	0	10	12	8	10
1929........	67.0	+1.1	100	28	4.74	+1.18	8.24	2.12	0	8	14	7	9
1930........	69.4	+3.5	95	32	2.14	−1.42	4.96	0.44	0	8	16	9	5
1931........	**70.5**	+4.6	100	34	1.98	−1.58	3.15	0.86	0	6	19	6	5
1932........	66.4	+0.5	100	27	2.29	−1.27	4.60	0.94	0	7	16	8	6
1933........	68.0	+2.1	93	38	6.07	+2.51	10.86	2.70	0	10	12	9	9
1934........	67.3	+1.4	91	35	**9.00**	+5.44	**13.52**	4.02	0	13	10	7	13
Period.....	65.9	....	109	23	3.56	....	13.52	0.14	0	8	15	8	7

W. B. O. Philadelphia-10-24-34-875.

Climatological Data for September, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, '01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	68.0	+3.0	87	4†	44	1†	37	8.33	+4.59	2.34	0	13	17	1	12	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	65.6	+3.5	89	11†	35	1	43	12.58	+8.43	2.37	0	14	15	1	14	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	......	......	......	......	42	14†	....	6.23	+2.21	2.10	0	7	14	8	8	e.	Brice E. Riker.
Dover	Morris	600	50	64.0ᵃ	+1.6	81	9†	41	1	33	12.16	+8.08	4.75	0	14	6	12	12	......	William C. Harris
Layton	Sussex	480	33	63.8	+1.2	83	9†	39	28	36	6.47	+2.61	1.03	0	14	9	4	12	se.	A. M. Depue.
Long Valley	Morris	520	4	64.6ᵃ	......	85	10	37	1	38	10.72	......	4.61	0	13	12	2	16	se.	S. N .Dilts.
Newton	Sussex	769	51	65.5	+1.7	84	10†	42	19†	37	8.88	+5.12	2.20	0	13	6	6	18	ne.	Irving J. Kern.
Phillipsburg	Warren	363	§51	67.0	+1.7	86	10	42	1	34	11.29	+7.80	4.16	0	12	10	10	10	......	Town Engineer.
Sussex	Sussex	442	39	......	......	......	......	......	......	....	12.03	+8.46	2.80	0	12	13	5	12	......	A. J. W. Mowatt
Means and extremes		......	....	65.5	+2.1	89	11†	35	1	43	9.85	+5.91	4.75	0	12	11	6	13	se.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	65.3	+1.8	86	10	40	1	36	12.35	+8.50	4.63	0	11	11	2	17	ne.	John Kline.
Canoe Brook	Essex	173	4	65.2	......	87	10	39	19	34	9.58	......	2.55	......	12	13	4	13	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30	......	......	......	......	......	......	....	9.55	+5.33	3.03	0	12	9	9	12	......	Paul Molitor. Sr.
Elizabeth	Union	45	55	67.6	+0.7	90	26†	46	28	34	11.41	+7.80	3.29	0	17	15	2	13	......	Union County Park Comm.
Flemington	Hunterdon	140	§48	68.1	+1.6	88	9	44	28	40	7.38	+3.74	2.37	0	14	12	8	10	e.	Hiram E. Deats.
Jersey City	Hudson	10	36	68.7	+1.2	86	10	50	19	22	10.32	+6.92	5.02	0	12	8	8	14	e.	S. K. Pearson.
Lambertville	Hunterdon	430	47	66.4	+0.6	83	4†	44	28	29	6.60	+3.24	2.50	0	16	8	8	14	e.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	67.2	−0.1	89	10	43	1	36	13.42	+9.74	4.58	0	12	10	6	14	nw.	Passaic Valley Water Co
New Brunswick	Middlesex	110	81	67.5	+1.7	84	9	46	19	27	9.13	+5.77	2.80	0	14	12	8	10	e.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	......	......	......	......	......	......	....	11.17	+7.09	3.16	......	12	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	66.4	0.0	84	10	45	1	31	10.48	+6.87	4.13	0	12	12	9	9	nw.	William H. Meyer.
Plainfield	Union	120	46	67.6	+2 1	88	10	44	1	32	10.97	+6.94	4.80	0	15	5	10	15	e.	S. K .Pearson.
Ridgefield	Bergen	80	17	67.6	+2.7	86	9†	46	19	31	10.00	+6.86	4.47	0	12	5	12	13	se.	George P. Kirsten.
Somerville	Somerset	70	51	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	A. C. Brooks.
Woodcliff Lake‡‡	Bergen	100	16	......	......	......	......	......	......	....	12.04	+8.18	2.98	0	12	....	....	....	......	Hackensack Water Co.
New York, N. Y.		314	64	68.2	+1.4	83	9	51	19	20	10.19	+6.80	4.92	0	12	7	9	14	e.	U. S. Weather Bureau.
Means and extremes		......	....	67.1	+1.2	90	26†	39	19	40	10.31	+6.68	5.02	0	13	10	7	13	e.	
The Southern Interior.																				
Belleplain	Cape May	30	40	......	......	......	......	......	......	....	6.59	+3.21	......	......	....	....	....	....	......	A. F. Waldron.
Bridgeton	Cumberland	30	51	68.8	+0.4	87	11†	48	18†	36	5.70	+2.39	2.42	0	11	16	3	11	ne.	Bennett K. Matlack
Burlington	Burlington	12	§48	69.4	+1.7	87	10	42	2	33	7.54	+3.98	2.58	0	12	11	9	10	sw.	Public Service Power Co.
Camden	Camden	20	2	68.8	......	91	9	39	19†	41	4.02	......	1.28	0	13	8	8	14	ne.	U. S. Weather Bureau.
Freehold	Monmouth	194	¶30	67.8	......	85	9†	45	1†	32	8.78	+4.49	2.76	0	13	13	3	14	e.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	68.3	......	85	27	42	18	34	6.99	+2.78	2.35	0	11	12	7	11	se.	Geo. W. Lobley.
Hightstown	Mercer	110	41	67.4	+0.7	86	4	43	1	34	11.36	+8.15	4.33	0	15	13	4	13	ne.	Braun Bros.
Indian Mills‡‡	Burlington	76	45	68.4	+2.0	87	9†	42	1	36	8.19	+4.70	3.73	0	13	5	14	11	s.	James M. Armstrong.
Lakewood	Ocean	54	30	67.2	+2.2	83	4†	43	1	28	5.13	+2.09	3.05	0	11	7	8	15	ne.	R. W. Holman.
Moorestown	Burlington	62	71	67.8	+1.5	85	27	47	1	30	8.19	+4.66	3.23	0	11	6	11	13	se.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	27	......	......		......	......	......	....	8.90	+6.05	6.56	0	9	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	68.9	......	87	4	44	1	34	8.43	......	3.46	0	17	13	3	14	e.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	67.8	......	86	9	43	1†	32	7.32	+4.35	3.35	......	10	16	2	12	ne.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	......	......	......	......	......	......	....	4.59	......	2.58	0	8	8	10	12	se.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	66.1	......	87	10†	35	1	45	10.90	+7.30	5.19	......	11	15	7	8	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	68.2	+1.3	85	9	48	19	27	10.49	+7.09	3.46	0	15	6	9	15	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	......	......	......	......	......	......	....	11.92	......	3.94	0	13	....	....	....	..	Edward H. Ristow.
Tuckerton	Ocean	23	41	67.5	+0.8	80	12†	49	19	20	5.49	+2.23	1.92	0	17	7	14	9	ne.	John H. Brown.
Philadelphia, Pa		114	63	70.8	+2.8	85	9	53	19	23	6.27	+3.13	2.13	0	15	6	8	16	e.	U. S. Weather Bureau.
Means and extremes		......	....	68.0	+1.3	91	9	35	1	45	7.81	+4.53	6.56	0	12	10	8	12	ne.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	......	......	......	......	......	......	....	......	......	......	......	....	....	....	....	......	S. W. Triano.
Atlantic City	Atlantic	52	61	69.6	+2.8	81	10	51	19	23	5.54	+2.89	3.43	0	12	5	10	15	e.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	67.2	+1.3	84	9	48	19†	27	6.66	+3.47	2.92	0	14	8	9	13	se.	William D. Martin.
Sandy Hook	Monmouth	22	36	69.0	+1.5	82	10	54	19	17	10.00	+6.57	3.51	0	14	6	9	15	e.	U. S. Weather Bureau.
Means and extremes		......	....	68.6	+1.9	84	9	51	19	27	7.40	+4.31	3.51	0	13	7	9	14	e.	
For the State		......	....	67.3	+1.4	91	9	35	1†	45	9.00	+5.44	6.56	0	13	10	7	13	e.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ᵃ, ᵇ ᶜ, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for September, 1934

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	....	....	.07	.26	....	....	.79	2.34	....	....	....	....	.05	.27	.46	.19	.75	....	....	....	....	....	.06	....	....	....	.04	....	1.55	1.50	....	8.33
Charlotteburg	Passaic	....	....	.67	.93	....	....	1.12	2.20	1.21	....	....	....	....	.10	1.44	.26	1.82	....	....	....	....	.36	.04	.06	....	....	....	....	.62	1.75	....	12.58
Culvers Lake	Delaware	.60	....	....	....	....	....	.40	2.10	....	....	....	....	....	.85	.85	.40	....	....	....	....	....	....	....	....	....	....	T.	....	1.03	T.	....	6.23
Dover	Passaic	....	....	*	.63	....	*	1.02	3.00	....	....	....	....	....	*	.96	.94	.80	....	....	....	....	.02	.03	....	....	....	.01	....	2.75	2.00	....	12.16
Layton	Delaware	....	....	.03	.48	....	....	.10	1.03	.30	....	....	....	....	.83	.74	.32	.78	....	....	....	....	.23	....	.05	....	....	.06	....	1.02	.50	....	6.47
Long Valley	Morris	....	....	.04	.70	....	....	1.50	2.40	....	.05	....	....	....	.26	.45	.46	1.18	....	....	....	....	....	.04	.03	....	....	....	....	.90	3.71	....	10.72
Newton	Delaware	....	....	.05	.60	....	....	.56	2.20	.38	....	....	....	....	.70	.93	.10	1.30	....	....	....	....	T	....	....	....	.08	.02	....	1.10	.86	....	8.88
Phillipsburg	...do	....	....	.03	.27	....	T.	.89	3.08	....	....	....	....	.03	.69	.58	.59	.39	....	....	....	T	.15	T.	....	....	....	T.	....	4.16	.43	....	11.29
Sussex	Hudson	....	....	*	*	....	....	1.20	2.10	.51	....	....	....	....	.21	2.13	.28	2.80	....	....	....	....	.03	....	....	....	....	....	....	1.97	.80	....	12.03
The Red Sandstone Plain.																																	
Boonton‖	Passaic	....	....	....	.48	.05	....	.56	1.07	2.75	....	....	....	....	T.	.92	.52	1.14	T.	....	....	....	....	.22	.01	....	....	....	....	T.	4.63	....	12.35
Canoe Brook‖	Essex	....	....	.01	.46	T.	....	.34	1 70	2.55	....	....	....	....	.05	.76	.25	1.28	....	....	....	....	....	.43	....	....	....	....	....	.06	1.69	....	9.58
Chatham‖	...do	....	....	....	.41	.08	....	.23	1.03	3.03	....	....	....	....	.01	.60	.25	1.68	.01	....	....	....	....	.42	....	....	....	....	....	....	1.81	....	9.55
Elizabeth	Coast	....	....	.10	.78	....	.08	.36	3.29	1.20	1.25	....	....	.03	.11	.68	.05	1.30	....	....	....	....	.32	....	.05	....	....	.01	....	.20	1.60	....	11.41
Flemington	Raritan	....	....	.03	.37	....	T.	.46	2.37	.21	....	....	....	.02	.19	.63	.07	1.30	....	....	....	....	T.	T.	.05	....	....	.02	....	.11	1.55	....	7.38
Jersey City	Coast	....	....	.36	.50	....	.10	.25	5.02	....	T.	....	T.	T.	.10	.35	.04	1.56	....	....	....	....	.60	T.	....	....	....	T.	....	.13	1.31	....	10.32
Lambertville	Delaware	....	....	....	.27	.06	.08	.80	2.50	.08	.02	....	....	.06	.24	.25	.04	.74	....	....	....	....	.03	....	T.	....	....	.06	....	.09	1.28	....	6.60
Little Falls‖	Passaic	....	....	....	1.52	.02	....	.38	1.23	2.88	....	....	....	....	....	.94	.19	1.33	....	....	....	....	....	.32	.02	....	....	....	....	.01	4.58	....	13.42
New Brunswick	Raritan	....	....	.06	.28	..	T.	.29	2.80	1.21	....	....	....	T.	.12	.28	.07	2.00	....	....	....	....	.02	.04	.40	....	....	T.	....	.06	1.50	....	9.13
New Milford‖	Hackensack	....	....	....	.77	.03	....	.12	1.03	3.16	....	....	....	....	....	.82	.38	.97	.03	....	....	....	....	.80	.06	....	....	....	....	....	3.00	....	11.17
Paterson	Passaic	....	....	.05	1.01	....	....	.51	1.90	....	....	....	....	....	.02	1.28	.45	.82	....	....	....	....	.16	.15	....	....	....	....	....	.30	3.83	....	10.48
Plainfield	Raritan	....	....	.05	.28	....	.05	.52	4.80	....	T.	....	T.	.04	.30	1.35	.09	1.40	....	....	....	T.	.17	.01	.01	....	....	T.	....	.17	1.73	....	10.97
Ridgefield**	Hackensack	....	....	T.	.64	....	.37	....	4.47	....	.02	....	T.	....	.20	.57	T.	1.27	....	....	....	....	1.30	T.	....	....	....	.01	....	.20	1.10	....	10.00
Somerville	Raritan	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Woodcliff Lake‖	Hackensack	....	....	....	.64	.03	....	.25	1.35	2.81	....	....	....	....	....	1.06	.95	1.20	.02	....	....	....	....	.70	.05	....	....	....	....	....	2.98	....	12.04
New York, N. Y***	Coast	....	....	.46	.37	....	.13	.26	4.92	....	T.	....	T.	T.	.33	.11	.22	1.32	....	....	....	T.	.60	T.	....	....	....	T.	....	.63	.84	....	10.19
The Southern Interior.																																	
Belleplain	Tuckahoe	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6.59
Bridgeton	Delaware	....	....	.39	....	....	....	.06	2.42	.78	....	....	.02	T.	.08	....	1.28	....	....	....	....	.06	....	....	....	....	....	.07	....	.52	.02	....	5.70
Burlington	Delaware	....	....	..	.27	..	T.	.35	.43	....	T.	....	....	.22	T.	.40	.60	1.98	....	....	....	....	.65	.96	....	....	....	.08	....	.40	1.20	....	7.54
Camden**	..do	....	....	.15	.01	....	.34	.60	1.28	T.	T.	T.	....	.01	.05	T.	.32	.51	....	....	....	....	.34	T.	....	....	....	.08	....	.18	.35	....	4.02
Freehold	Raritan	....	....	.05	.31	..	.03	.07	2.30	2.00	....	....	....	T.	.03	.04	....	2.76	....	....	....	....	.34	....	....	....	....	.02	....	.04	.79	....	8.78
Hammonton	Mullica	....	....	.85	....	....	.26	2.35	1.62	....	....	....	....	.06	....	....	.60	.08	....	....	....	.07	.60	....	....	....	....	....	....	.40	.10	....	6.99
Hightstown	Raritan	....	....	.05	.38	....	.04	.43	3.52	.03	....	....	....	T.	.11	.03	.06	4.33	....	....	....	....	.23	T.	48	....	....	.17	....	.10	1.40	....	11.36
Indian Mills	Mullica	....	....	.04	.48	....	.08	T	3.73	....	....	....	....	....	.05	....	.07	1.10	....	....	....	....	.42	.04	1.32	....	....	.20	....	.08	.58	....	8.19
Lakewood	Metedeconk	....	....	.10	.14	....	....	.13	3.05	.14	....	....	....	T.	T.	T.	T.	.42	....	....	....	....	.11	.14	....	....	....	.10	....	.35	.45	....	5.13
Moorestown‖	Delaware	....	....	.21	....	....	.34	3.23	.81	....	.18	....	....	.03	....	.05	1.42	....	....	....	....	....	.62	.27	....	....	....	....	....	1.03	....	....	8.19
Northfield	Coast	....	....	.12	.08	....	1.29	.07	6.56	....	....	....	....	....	T	....	T.	.38	....	....	....	....	....	....	....	....	....	.03	....	.18	.19	....	8.90
Pemberton	Delaware	....	....	.01	.25	....	.03	.10	2.11	.32	T.	....	....	.01	.01	.05	.04	3.46	....	....	....	....	.40	.02	.05	....	....	....	.07	.11	1.39	....	8.43
Pleasantville‖	Coast	....	....	....	.22	....	.10	.82	2.25	3.35	....	.	....	....	....	.01	....	.11	.18	....	....	....	....	....	....	T.	T.	....	.02	T.	.26	....	7.32
Port Norris	Maurice	....	....	.10	....	....	.09	.26	2.58	....	....	....	....	....	....	....	.18	.75	....	....	....	....	....	....	....	....	....	....	.32	.31	....	....	4.59
Runyon	Coast	....	....	.07	.30	....	....	....	5.19	....	....	....	....	....	.14	.16	.02	2.25	....	....	....	....	.19	....	.59	....	....	....	....	.12	1.87	..	10.90
Trenton***	Delaware	....	....	.29	.05	....	.28	.76	2 41	T.	T.	....	....	.01	.01	T.	.34	3.12	....	....	....	....	.21	1.36	.01	....	....	.18	....	.25	1.21	....	10.49
Trenton No. 2‖	...do	....	....	....	.29	T.	....	.55	1.87	1.53	....	....	....	T.	.09	.02	....	2.85	1.09	....	....	....	....	.31	1.46	....	....	....	.23	.01	1.62	....	11.92
Tuckerton	Coast	....	....	.46	.29	....	.12	1.92	1.46	.22	....	.06	....	.04	.02	....	.11	.26	....	....	....	....	.02	....	.06	.02	....	.05	....	.11	.27	....	5.49
Phila., Pa***	Delaware	....	....	.15	.04	....	.91	1.08	1.48	....	.06	....	....	.08	.05	T.	.34	.52	....	....	....	....	.11	.17	....	.	T.	.02	....	.39	.87	....	6.27
The Sea Coast.																																	
Asbury Park	Coast	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Atlantic City***	....do	....	....	.07	.01	....	1.36	1.19	2.24	....	.01	....	....	T	.01	....	.02	.34	....	....	....	....	T	T.	T.	T.	....	.02	....	.14	.13	....	5.54
Long Branch**	....do	....	....	.26	.05	....	.02	.06	2.92	....	.01	....	....	T.	.02	T.	.16	.84	....	....	....	....	1.35	.01	T.	T	....	T.	..	.11	.85	....	6.66
Sandy Hook***	....do	....	....	.70	.08	....	.04	.02	3.18	....	.20	....	....	.01	.18	.01	.47	3.04	....	....	....	....	.71	T.	....	T.	....	....	....	.02	1.34	....	10.00

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.10	30.44	1	29.60	8	14.2	60	nw.	8	86	78	84	49
Long Branch	30.07	30.47	1	29.55	8	......	......	......	......	85	66	80	47
New York, N. Y	30.09	30.48	1	29.59	8	10.7	65	n.	8	83	73	79	46
Philadelphia, Pa	30.10	30.48	1	29.79	4	10.3	36	ne.	8	81	66	76	45
Ridgefield	30.09	30.48	1	29.58	8	......	......	......	......	......	......	......	......
Sandy Hook	30.09	30.49	1	29.54	8	11.9	65	n.	8	85	75	80	44
Trenton	30.09	30.46	1	29.73	4	8.1	35	n.	8	86	68	82	52

Daily Temperatures for September, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	79	82	77	87	83	81	75	69	86	87	85	69	67	67	79	76	75	71	73	81	76	77	80	87	82	81	81	73	70	73	....	77.6
	Minimum	44	46	57	68	64	55	65	65	60	62	64	61	61	58	63	65	59	51	54	44	50	64	68	65	66	61	60	44	47	63	....	58.5
Charlottebnrg	Maximum	77	77	78	80	84	84	74	74	84	86	89	89	72	66	66	72	72	75	70	74	79	72	79	80	81	89	83	79	73	73	....	77.7
	Minimum	35	38	45	69	64	46	62	63	61	59	46	48	56	58	60	63	56	51	43	39	47	58	61	60	53	63	58	44	40	61	....	53.6
Dover	Maximum	70	75	72	80	76	73	71	69	81	81	77	72	64	65	67	71	71	64	65	71	71	70	....	78	76	80	77	68	71	70	....	72.3^{a}
	Minimum	41	42	53	67	60	51	63	64	62	61	52	57	59	59	61	65	57	51	43	43	50	62	63	....	64	57	61	46	44	59	....	55.8^{a}
Layton	Maximum	74	78	76	78	76	78	75	67	83	82	80	76	67	67	67	74	71	65	65	77	75	71	83	83	80	83	76	68	65	71	....	74.4
	Minimum	40	44	45	60	58	48	62	64	60	52	48	52	55	52	51	64	56	50	40	41	49	60	66	64	62	61	60	39	42	54	....	53.3
Long Valley	Maximum	70	75	73	83	77	75	84	67	83	85	84	74	66	66	70	74	74	65	67	75	72	73	78	82	77	82	....	80	70	72	....	74.9^{a}
	Minimum	37	40	53	66	58	48	62	64	60	59	49	56	58	57	61	65	56	49	42	39	47	61	66	62	62	55	....	42	42	63	....	54.4^{a}
Newton	Maximum	74	78	77	83	78	77	73	70	83	84	81	76	67	67	70	76	74	69	69	79	78	74	78	81	76	84	80	71	72	72	....	75.6
	Minimum	44	45	58	55	62	50	61	60	60	61	52	56	58	57	59	63	56	50	42	42	50	61	65	64	61	57	61	44	47	60	....	55.4
Phillipsburg	Maximum	75	80	74	85	80	78	75	70	83	86	82	76	66	67	74	74	75	68	71	77	73	75	79	84	79	81	80	70	71	73	....	76.0
	Minimum	42	46	56	69	65	52	66	66	60	68	53	60	61	60	64	66	60	52	43	47	52	64	68	63	63	61	60	46	48	59	. ..	58.0
Sussex	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
The Red Sandstone Plain.																																	
Boonton§§	Maximum	75	77	75	81	77	78	75	69	84	86	81	78	68	68	67	74	73	67	71	76	74	72	81	82	83	83	79	69	74	74	....	75.7
	Minimum	40	41	44	59	61	50	53	65	64	62	51	54	57	60	61	63	62	54	44	44	45	55	66	64	64	55	57	44	44	65	....	54.9
Canoe Brook§§	Maximum	73	77	75	83	80	76	75	72	85	87	81	75	72	69	70	74	72	68	72	75	73	71	81	84	81	83	83	72	72	75	....	76.2
	Minimum	45	43	49	62	61	49	62	65	60	60	47	53	55	56	62	63	60	52	39	41	49	57	66	62	64	55	55	40	42	52	....	54.2
Elizabeth	Maximum	72	75	72	80	78	77	76	70	85	83	87	76	67	66	69	73	72	74	70	68	67	73	80	87	85	90	90	80	75	72	....	76.3
	Minimum	48	49	57	69	64	56	64	66	63	61	55	61	61	60	64	63	61	54	47	48	54	64	68	66	67	58	60	46	48	66	.. .	58.9
Flemington	Maximum	74	85	72	87	84	80	75	70	88	86	85	80	69	69	76	76	73	70	72	79	72	74	80	85	82	85	84	76	72	78	....	77.9
	Minimum	45	45	56	68	65	54	64	66	62	64	56	61	59	60	64	66	60	50	45	46	52	64	68	65	66	59	61	44	47	66	....	58.3
Jersey City	Maximum	72	76	74	81	80	75	76	71	84	86	81	75	68	69	69	74	70	69	70	75	71	73	80	81	80	82	83	72	72	74	....	75.4
	Minimum	60	58	63	67	67	64	65	63	64	68	62	63	61	62	63	65	60	54	50	53	60	66	67	68	66	63	61	55	57	66	....	62.0
Lambertville	Maximum	75	77	70	83	78	78	74	70	83	82	81	75	67	68	75	75	74	64	69	75	74	77	78	83	76	81	83	71	73	73	....	75.4
	Minimum	48	48	47	67	60	55	64	66	60	67	55	60	59	63	64	63	58	49	45	47	54	63	67	65	54	59	61	44	49	65	....	57.5
Little Falls§§	Maximum	77	80	76	86	84	84	75	73	86	89	83	79	69	70	70	75	72	71	72	78	76	72	81	81	85	85	83	73	73	75	....	77.8
	Minimum	43	44	52	61	65	53	63	64	63	63	53	57	59	59	61	63	61	54	44	44	51	60	66	64	65	60	59	45	46	53	....	56.5
New Brunswick	Maximum	70	73	73	83	81	76	76	73	84	83	82	80	68	70	76	76	73	69	70	74	71	73	79	81	77	81	82	74	75	75	....	75.9
	Minimum	47	49	55	68	66	55	64	66	62	67	58	62	61	60	65	64	60	51	46	47	52	64	69	66	66	58	62	47	48	67	....	59.1
Paterson	Maximum	73	75	75	81	77	76	74	70	83	84	78	76	67	69	66	74	72	67	67	74	74	71	79	80	78	82	81	77	70	72	....	74.7
	Minimum	45	47	54	68	63	53	64	65	62	64	53	59	58	60	63	61	61	55	47	47	51	62	68	66	66	58	63	46	47	65	....	58.0
Plainfield	Maximum	74	79	74	82	80	76	76	70	85	88	83	76	70	69	70	75	70	71	73	77	73	74	82	85	81	84	85	73	72	77	....	77.0
	Minimum	44	48	56	65	64	54	64	66	62	64	54	60	60	60	64	63	60	53	46	45	52	63	68	65	66	58	60	46	46	66	....	58.1
Ridgefield	Maximum	74	79	73	85	81	78	77	72	86	86	80	75	68	70	69	77	72	70	70	75	75	71	80	80	81	82	84	70	73	75	....	76.3
	Minimum	48	48	57	68	65	55	64	65	63	63	55	59	60	61	63	65	61	52	46	48	54	64	68	66	66	60	61	49	50	60	...	58.8
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y	Maximum	69	73	73	81	78	74	76	72	83	83	80	75	67	68	68	72	71	67	68	74	70	72	79	79	80	81	81	70	73	72	....	74.3
	Minimum	60	59	63	68	67	65	65	63	64	68	63	64	61	62	62	65	60	54	51	54	62	67	67	68	66	64	62	55	58	59	....	62.2
The Southern Interior.																																	
Belleplain	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	79	79	74	86	78	80	72	78	75	86	87	83	71	73	81	76	77	67	73	80	76	81	76	84	73	78	87	75	82	77	....	78.1
	Minimum	51	60	66	65	60	58	62	66	65	70	60	62	62	63	64	61	50	48	48	52	61	68	67	64	59	61	51	50	65	49	....	59.6
Burlington	Maximum	77	75	80	85	80	78	80	74	86	87	82	83	78	73	81	80	79	70	70	77	78	77	81	83	77	82	86	70	78	80	....	78.9
	Minimum	47	42	60	69	67	55	67	68	63	69	58	61	62	62	65	64	62	52	48	47	55	66	68	66	66	58	60	54	48	67	....	59.9
Camden	Maximum	78	80	73	86	83	75	77	77	91	89	85	83	73	74	85	81	77	69	73	80	80	80	80	78	77	86	90	74	83	79	....	79.9
	Minimum	48	50	60	70	63	53	67	66	65	69	59	61	56	62	63	64	54	50	39	39	52	66	67	62	61	53	60	45	47	64	....	57.8
Freehold	Maximum	74	77	71	84	81	82	81	73	85	84	82	80	68	70	79	78	75	66	70	75	75	77	79	80	85	81	84	76	75	76	....	77.4
	Minimum	45	45	60	69	66	51	66	68	63	65	56	61	61	60	66	64	61	50	45	48	51	65	63	63	66	52	58	47	47	67	....	58.3
Hammonton	Maximum	76	79	74	83	80	74	80	76	81	83	83	79	70	73	80	79	72	68	71	77	76	81	75	82	74	81	85	74	79	73	....	77.3
	Minimum	50	60	66	66	59	62	68	64	70	60	60	62	63	64	65	65	49	42	49	53	57	69	60	65	58	60	51	51	61	50	....	59.3
Hightstown	Maximum	73	79	70	86	79	77	78	73	85	83	82	77	69	73	80	79	73	64	70	75	75	75	79	82	76	81	85	70	74	74	....	76.5
	Minimum	43	45	54	69	66	54	66	67	63	65	55	60	59	61	66	64	58	50	45	45	52	64	69	67	64	59	61	46	47	67	....	58.4
Indian Mills	Maximum	76	79	72	85	80	75	81	77	87	85	84	79	70	72	82	77	76	70	70	79	79	81	76	81	76	82	87	73	79	86	....	78.5
	Minimum	42	48	60	69	65	54	66	68	63	65	55	59	60	60	65	65	62	50	45	43	51	65	68	68	62	55	58	45	45	68	....	58.3
Lakewood	Maximum	71	75	71	83	78	76	79	73	83	82	79	75	69	71	77	78	75	66	68	70	73	76	77	78	74	79	83	75	77	74	....	75.5
	Minimum	43	47	59	69	67	55	67	68	63	65	55	57	63	61	64	60	63	51	45	45	49	65	69	67	70	56	59	50	60	58	....	59.0
Moorestown	Maximum	75	78	74	84	78	75	78	75	84	83	80	77	70	72	81	74	74	65	70	76	76	77	78	82	74	81	85	70	79	76	....	76.7
	Minimum	47	50	58	65	66	56	67	68	64	59	58	62	61	62	64	65	57	51	48	48	54	66	69	66	61	60	60	48	49	60	....	59.0
Pemberton	Maximum	75	81	75	87	81	76	80	76	86	85	83	78	71	71	80	80	75	68	72	78	75	78	78	84	75	84	86	75	78	78	....	78.3
	Minimum	44	47	61	70	66	54	68	69	63	67	58	59	61	62	67	64	62	51	46	46	52	66	69	69	65	57	60	49	47	67	....	59.5
Pleasantville§§	Maximum	73	75	74	80	82	73	79	76	86	84	77	79	72	74	79	79	80	69	73	74	75	79	75	77	72	79	80	73	75	71	....	76.5
	Minimum	43	50	60	68	68	59	62	67	64	67	58	58	65	65	65	68	71	49	44	44	50	62	68	66	65	53	56	50	43	66	....	59.1
Runyon	Maximum	77	78	85	86	84	80	78	73	86	87	81	77	75	71	79	78	73	71	71	76	75	80	81	81	78	85	87	87	78	79	....	79.2
	Minimum	35	37	47	54	39	47	65	62	64	62	61	52	53	61	65	59	60	42	38	39	45	60	63	65	65	56	54	52	39	50	....	53.0
Trenton	Maximum	72	78	73	84	78	76	77	73	85	83	82	76	68	71	78	77	72	65	69	77	75	76	78	82	77	81	83	69	77	76	....	76.3
	Minimum	50	51	58	69	64	58	65	67	63	69	61	61	61	61	66	64	57	52	48	52	55	65	68	67	65	60	60	52	53	59	....	60.0
Tuckerton	Maximum	70	72	72	75	75	78	76	75	76	79	75	80	75	75	78	75	70	69	69	75	78	75	80	75	78	75	75	75	70	74	....	74.8
	Minimum	56	58	60	60	61	60	61	60	61	65	60	72	65	60	60	64	54	51	49	59	60	58	65	70	60	62	58	60	58	60	....	60.2
Philadelphia, Pa	Maximum	79	81	73	83	78	75	79	75	85	84	83	79	70	72	81	77	76	66	71	77	76	80	78	84	76	82	85	70	79	76	....	77.7
	Minimum	58	58	62	70	68	66	68	69	66	72	67	65	65	64	67	68	59	56	53	56	59	67	69	70	68	64	64	58	60	63	....	64.0
The Sea Coast.																																	
Asbury Park	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Atlantic City	Maximum	71	73	73	76	80	72	76	74	80	81	76	74	72	73	78	74	74	69	74	72	73	76	74	75	71	75	76	71	74	74	....	74.4
	Minimum	65	60	69	70	68	64	68	68	68	71	66	68	67	68	70	71	60	52	51	55	63	70	70	69	66	61	66	56	60	63	....	64.8
Long Branch	Maximum	71	71	72	82	80	71	76	71	84	81	77	73	70	70	74	75	72	68	70	70	71	72	78	76	75	79	80	67	75	75	....	74.2
	Minimum	49	53	64	69	60	59	66	67	64	63	57	60	65	63	66	68	61	50	48	49	53	67	68	69	63	61	62	52	48	63	....	60.2
Sandy Hook	Maximum	70	71	71	80	77	75	75	72	82	82	79	73	69	71	72	74	72	68	70	70	71	72	78	75	74	79	81	66	75	74	....	73.9
	Minimum	62	61	64	69	67	65	67	66	68	69	66	66	63	65	67	67	63	57	54	59	62	68	69	69	66	63	64	57	61	62	....	64.2

^{a}, ^{b}, ^{c}, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook**	Evaporation	.160	.146	.012	.096	.168	.084	.020	.006	.112	.136	.144	.096	.042	*	*	*	.066	.112	.096	.104	.072	*	.038	.136	.128	.112	.112	.124	.074	.098	....	2.494
	Wind movement	9	21	12	24	20	11	16	15	27	9	7	8	19	12	18	26	36	18	18	8	10	15	7	4	13	6	10	18	7	15	....	439
Pleasantville**	Evaporation	.192	.160	*	.220	.260	*	.334	***	.128	.192	.192	.208	.160	.106	.192	.014	.100	.192	.128	.096	.096	.064	.032	.160	.112	.144	.068	.176	*	.004	....	3.859
	Wind movement	39	43	45	81	76	31	5	52	64	31	24	31	27	82	67	62	*	142	27	33	14	58	47	19	38	20	22	58	28	88	....	1374
Runyon	Evaporation	.180	.170	.190	.000	.150	.120	.120	***	.100	.135	.130	.120	.090	.110	.280	.020	***	.080	.120	.120	.120	.010	*	.110	.120	.120	.120	.120	*	.070	....	3.241
	Wind movement	32	35	32	29	22	18	11	69	26	26	18	12	22	17	33	23	31	16	24	20	16	10	11	25	12	10	28	22	24	23	....	697

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day. *** Pan overflowed.

51.05
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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. OCTOBER, 1934. No. 10.

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GENERAL SUMMARY.

Cool and dry weather prevailed during the greater part of the month. In contrast with the excessive wetness of September, this month had only six days on which appreciable rainfall was general, and of the month's total about three-fourths of it occurred on one-day, the 6th. Other dates on which rain of light to moderate amounts fell were the 21st and 22d, and from the 26th to 28th, inclusive. Outside of these six days there was practically no rain. The average for the State was 73% of the normal, with the various districts ranging as follows: The Highlands, 65%; Red Sandstone Plain, 75%; Southern Interior, 67%; Sea Coast, 54%. The first snow of the season came on the 28th. It occurred at about three-fourths of the stations and was of inappreciable amounts.

The temperature ranged below the normal during the first few days of the month and again during the last few days; also, during the periods from the 12th to 14th and 19th to 21st. Above-normal periods occurred from the 6th to 9th, 11th, 16th to 18th, and 22d to 26th, with the highest temperatures of the month well up in the seventies and recorded mostly on the 11th with a few on the 3d. The lowest were in the low twenties in the most northern part, and in the high twenties and low thirties over the remainder. Freezing temperatures were registered at practically all stations, the few exceptions being along the sea coast.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 35 stations, was 52.6°, which was 2.1° below normal. The highest temperature was 82° at Burlington on the 15th, and the lowest, 21°, at Runyon on the 30th. The greatest daily range of temperature was 45° at Runyon on the 14th. The highest monthly mean temperature was 57.6° at Tuckerton, and the lowest, 48.3° at Layton.

The temperature departure from the normal for the year, 1934, to date, by sections, is: The Highlands, +0.2°; Red Sandstone Plain, —0.6°; Southern Interior, —0.7°; Sea Coast, —0.4°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 42 stations, was 2.49 inches, which was 0.92 inch below normal. The average total snowfall at 20 selected station was a Trace. The greatest monthly precipitation was 3.43 inches, at Chatham, and the least, 1.48 inches at Burlington and Tuckerton. The greatest amount of precipitation in any 24 consecutive hours was 2.65 inches at New Brunswick on the 6th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 6, or 2 less than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, +1.96 inches; Red Sandstone Plain, +3.54 inches; Southern Interior, +0.69 inch; Sea Coast, —2.19 inches.

WIND.

The prevailing wind direction was from the west. The wind movement averaged 10 miles per hour, which was 2 miles below normal. The highest velocity, sustained for 5 consecutive minutes, was 37 miles per hour from the northwest at Sandy Hook on the 12th.

MISCELLANEOUS.

The per cent of possible sunshine was 61, or 2 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.04 inches, or 0.03 inch below normal. The highest reading was 30.45 inches at Ridgefield on the 5th, and the lowest 29.51 inches at Long Branch and Ridgefield on the 11th.

The mean stage of the Delaware River at Phillipsburg was 3.0 feet, and the highest 7.7 feet on the 1st. At Trenton the mean was 2.1 feet, and the highest 4.9 on the 2d.

Thunderstorms occurred quite generally throughout the State on either the 21st or 22d, and in some localities on the 26th, 30th and 31st. Dense fog occured on the following dates: 6, 11, 22 and 25. Sleet was noted on the 27th at Dover. A light fall of hail occurred on the 22d at Lakewood. Killing frost occurred at nearly all stations in the State, and was noted either on the 13th or the 30th.

COMPARATIVE DATA FOR OCTOBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	54.2	−0.5	82	29	4.20	+0.79	5.85	2.91	0	....	....	....	....
1886	55.6	+0.9	88	21	3.22	−0.19	8.16	2.02	0	....	....	....	....
1887	52.3	−2.4	89	21	2.61	−0.80	5.00	1.58	0	7	....	....	....
1888	49.2	−5.5	73	25	4.73	+1.32	7.00	2.97	0	12	....	....	....
1889	50.8	−3.9	82	23	3.80	+0.39	5.03	2.42	0	11	....	....	....
1890	53.9	−0.8	81	24	6.33	+2.92	10.18	3.40	0	13	9	8	14
1891	52.8	−1.9	92	18	3.44	+0.03	5.57	1.88	0	8	11	11	9
1892	53.6	−1.1	85	21	0.52	−2.89	1.09	0.04	0	4	14	12	5
1893	55.2	+0.5	85	17	4.22	+0.81	6.59	1.74	0	7	15	7	9
1894	55.3	+0.6	87	27	5.67	+2.26	8.23	3.90	0	10	12	7	12
1895	49.9	−4.8	83	18	3.60	+0.19	5.53	1.62	0	5	19	7	5
1896	51.5	−3.2	82	21	2.24	−1.17	4.58	1.72	0	8	11	8	12
1897	55.8	+1.1	**95**	22	2.43	−0.98	6.49	0.87	0	7	14	8	9
1898	56.5	+1.8	88	24	5.76	+2.35	8.42	3.92	0	10	13	9	9
1899	56.6	+1.9	86	18	2.72	−0.69	4.65	1.07	0	6	13	10	8
1900	**59.9**	+5.2	92	19	3.70	+0.29	6.59	1.47	0	10	10	8	13
1901	54.4	−0.3	82	21	1.93	−1.48	4.45	0.87	0	4	17	8	6
1902	56.0	+1.3	80	20	6.39	+2.98	9.35	3.82	0	8	15	7	9
1903	55.9	+1.2	86	24	**8.92**	+5.51	**16.19**	4.17	0	8	13	9	9
1904	51.9	−2.8	89	15	3.78	+0.37	7.01	1.50	0	5	20	6	5
1905	55.5	+0.8	90	17	2.71	−0.70	4.83	0.75	0	7	18	7	6
1906	55.0	+0.3	80	**11**	4.46	+1.05	7.14	2.66	0	11	8	9	14
1907	50.6	−4.1	80	18	4.46	+1.05	7.18	2.70	0	7	22	5	4
1908	57.3	+2.6	92	19	2.71	−0.70	5.14	1.30	0	8	15	5	11
1909	51.2	−3.5	84	18	1.18	−2.23	1.82	0.40	0	8	17	7	7
1910	57.2	+2.5	90	18	3.15	−0.26	5.55	1.55	0	7	15	8	8
1911	53.9	−0.8	80	18	5.49	+2.08	8.23	2.61	0	12	10	9	12
1912	57.0	+2.3	88	25	3.30	−0.11	6.95	1.72	0	5	17	8	6
1913	57.8	+3.1	83	25	7.79	+4.38	13.84	2.70	0	11	12	9	10
1914	58.1	+3.4	88	19	1.99	−1.42	3.08	0.90	0	5	13	9	9
1915	56.2	+1.5	84	23	3.03	−0.38	5.18	1.89	0	9	17	7	7
1916	55.1	+0.4	92	23	1.37	−2.04	2.38	0.51	0	4	18	8	5
1917	50.7	−4.0	84	22	6.99	+3.58	9.74	4.28	0	10	15	8	8
1918	57.0	+2.3	84	22	1.25	−2.16	2.36	0.74	0	8	16	9	6
1919	59.0	+4.3	92	25	3.43	+0.02	4.97	2.01	0	13	9	8	14
1920	59.0	+4.3	87	28	1.80	−1 61	4.53	0.55	0	5	20	5	6
1921	54.1	−0.6	82	16	0.97	−2.44	2.18	0.33	0	5	18	7	6
1922	56.6	+1.9	92	18	1.48	−1.93	2.70	0.55	0	7	19	6	6
1923	53.9	−0.8	81	21	4.25	+0.84	6.37	2.35	0	8	16	8	7
1924	54.4	−0.3	84	16	**0.31**	−3.10	2.76	**T.**	0	1	23	6	2
1925	**49.1**	−5.6	84	12	4.59	+1.08	5.78	3.38	0	11	9	9	13
1926	53.1	−1.6	90	17	4.08	+0.67	6.03	1.79	0	11	13	8	10
1927	56.8	+2.1	94	23	7.82	+4.41	14.07	2.81	0	10	18	5	8
1928	56.1	+1.4	90	16	1.19	−2.22	2.58	0.24	0	6	17	9	5
1929	52.3	−2.4	80	17	4.61	+1.20	7.35	2.62	0	8	15	8	8
1930	52.6	−2.1	89	12	1.95	+1.46	3.70	0.93	0	6	17	7	7
1931	58.3	+3.6	92	24	2.76	−0.65	4.69	1.67	0	8	17	7	7
1932	56.2	+1.5	89	21	5.85	+2.44	9.64	3.53	0	10	13	6	12
1933	53.6	−1.1	84	18	2.04	−1.37	3.37	0.85	T.	6	18	7	6
1934	52.6	−2.1	82	21	2.49	−0.92	3.43	1.48	T.	6	17	6	8
Period	54.7	....	95	11	3.41	....	16.19	T.	0	8	15	8	8

W. B. O. Philadelphia-11-23-34-875

Climatological Data for October, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	52.4	−2.7	78	3†	27	30	41	2.26	−1.57	1.43	T.	6	18	5	8		Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	51.5	+0.2	78	1	25	31	41	2.48	−1.93	1.85	0	6	22	0	9	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33					29	30		2.67	−0.94	2.10	T.	5	20	8	3	e.	Brice E. Riker.
Dover	Morris	600	50	49.6^{a}	−1.8	73	11	26	31	32	2.71	−1.43	1.95	T.	7	9	17	5		William C. Harris
Layton	Sussex	480	33	48.3	−2.8	76	11	22	31	44	2.21	−1.54	1.63	T.	5	14	5	12	nw.	A. M. Depue.
Long Valley	Morris	520	4	50.1		73	3†	23	31	38	2.82		1.87	0	7	16	7	8	w.	S. N .Dilts.
Newton	Sussex	769	51	51.0	−1.8	78	18	30	13†	38	2.27	−1.38	1.36	T.	9	15	2	14	sw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	51.8	−1.9	76	11	29	31	43	1.98	−1.62	1.25	T.	5	15	10	6		Town Engineer.
Sussex	Sussex	442	39	51.6	−1.3	79	3†	29	14	41	2.73	−0.63	1.59	0	5	21	4	6		A. J. W. Mowatt
Means and extremes				50.6	−1.7	79	3†	22	31	44	2.52	−1.35	2.10	T.	6	17	6	8	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	50.8	−1.2	74	3†	27	31	38	2.71	−1.20	2.02		7	21	2	8	ne.	John Kline.
Canoe Brook	Essex	173	4	50.6		76	11	23	14	41	3.34		2.38		6	18	1	12	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30								3.43	−0.68	2.27	0	8	15	9	7		Paul Molitor. Sr.
Elizabeth	Union	45	55	51.0	−4.3	73	7	29	30	27	2.75	−1.20	2.04	T.	8	22	4	5		Union County Park Comm.
Flemington	Hunterdon	140	§48	54.2	−1.4	80	11	28	31	40	2.35	−1.16	1.90	T.	7	22	5	4	w	Hiram E. Deats.
Jersey City	Hudson	10	36	54.1	−2.1	75	11	35	13†	25	2.41	−1.69	1.73	T.	5	14	7	10	n.	S. K. Pearson.
Lambertville	Hunterdon	430	47	52.2	−2.0	76	11	31	14†	32	2.62	−0.93	1.58	T.	6	19	5	7	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	52.2	−1.0	79	3	28	31	39	2.99	−0.60	2.18	0	9	19	4	8	w.	Passaic Valley Water Co
New Brunswick	Middlesex	110	81	52.9	−1.8	77	11	30	30	33	3.30	−0.52	2.65	0	6	20	7	4	w.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16								2.62	−0 26	1.48	0	7					Hackensack Water Co
Paterson	Passaic	80	64	51.9^{a}	−3.3	75	11	29	31	34	2.51	+1.60	1.75	T.	5	18	8	5	w.	William H. Meyer.
Plainfield	Union	120	46	52.8	−1.0	77	11	29	31	35	2.70	−1.38	2.13	0.1	6	14	9	8	n.	S. K .Pearson.
Ridgefield	Bergen	80	17	51.6	−1.4	76	11	31	14	32	3.36	−0.87	2.16	T.	6	14	7	10	nw.	George P. Kirsten.
Somerville	Somerset	70	51																	Louis L. Miller.
Woodcliff Lake‡‡	Bergen	100	16								2.47	−0.38	1.19		5					Hackensack Water Co.
New York, N.Y.		314	64	53.8	−2.5	74	11	35	13	24	2.27	−1.26	1.60	T	7	14	7	10	n.	U. S. Weather Bureau.
Means and extremes				52.2	−2.0	80	11	23	14	41	2.83	−0.96	2.65	T.	6	18	6	7	w.	
The Southern Interior.																				
Belleplain	Cape May	30	40																	Mrs. Edward C. Hoffman.
Bridgeton	Cumberland	30	51	53.4	−3.8	77	3†	29	29	33	2.82	−0.28	1.88	0	6	26	1	4	nw.	Bennett K. Matlack
Burlington	Burlington	12	§48	55.3	−1.6	82	15	29	30	36	3.05	−0.44	1.55	T.	5	21	5	5	ne.	Public Service Power Co.
Camden	Camden	20	2	53.3		79	11	32	21†	39	1.48		0.64	T.	5	11	15	5	nw.	Central Airport, Inc.
Freehold	Monmouth	194	¶30	53.0		76	11	29	14	34	1.76	−1.95	1.45	0	3	17	8	6	w.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	54.3		77	11	31	29	36	2.92	−0.93	1.87	0	6	22	6	3	nw.	Geo. W. Lobley.
Hightstown	Mercer	110	41	52.4	−2.5	76	11	30	31	33	2.66	−1.04	1.94	T.	4	20	3	8	nw.	Braun Bros.
Indian Mills‡‡	Burlington	76	45	53.8	−1.4	79	11	28	31	38	2.46	−1.23	2.10	0	4	15	8	8	sw.	James M. Armstrong.
Lakewood	Ocean	54	30	52.6	−1.6	75	11	27	30	32	2.37	−1.43	1.75	T.	4	12	9	10	nw.	R. W. Holman.
Moorestown	Burlington	62	71	52.8	−2.1	76	11	30	31	35	2.10	−1.38	1.25	0	5	17	4	10	n.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	27								1.98	−1.22	1.40	0	5					William L. Flick.
Pemberton	Burlington	55	4	54.6		77	11	30	30	37	1.92		1.50	T.	5	19	6	6	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	52.8		78	11	25	31	39	2.09	−1.24	1.35		6	25	0	6		N. J. Water Policy Comm.
Port Norris	Cumberland	10	2								2.33		2.20	0	3	20	6	5	sw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	52.2		79	11	21	30	45	2.91	−0.91	1.86		5	20	9	2	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	53.2	−2.4	77	11	34	20	30	2.15	−0.63	1.73	T.	7	13	10	8	n.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9								2.34		1.90	T.	6					Edward H. Ristow.
Tuckerton	Ocean	23	41	57.6	+1.7	76	6	30	13	25	1.48	−2.14	0.80	T.	9	15	7	9	n.	John H. Brown.
Philadelphia, Pa		114	63	56.0	−1.8	78	11	36	20	28	1.54	−1.27	1.28	T.	5	14	6	11	n.	U. S. Weather Bureau.
Means and extremes				53.7	−1.7	82	15	21	30	45	2.28	−1.14	2.20	T.	5	18	7	6	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45																	S. W. Triano.
Atlantic City	Atlantic	52	61	55.6	−1.3	76	11	35	13	27	1.57	−1.63	1.42	T.	5	13	5	13	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	51.9	−3.5	76	11	32	14†	31	2.46	−1.93	1.67	T.	7	13	8	10	nw.	William D. Martin.
Sandy Hook	Monmouth	22	36	54.7	−2.2	74	11	38	13	21	2.15	−1.63	1.44	T.	7	13	9	9	w.	U. S. Weather Bureau.
Means and extremes				54.1	−2.3	76	11	32	14†	31	2.06	−1.73	1.67	T.	6	13	7	11	w.	
For the State				52.6	−2.1	82	15	21	30	45	2.49	−0.92	2.65	T.	6	17	6	8	w.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for October, 1934

Stations	Drainage Basin	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware						1.43						.05									T.	.30	.06			.35	T.	.06				2.25
Charlotteburg	Passaic						1.85						.06						.02				.20				.30		.05				2.48
Culvers Lake	Delaware						2.10				.10												.15				.20	.12	T.				2.67
Dover	Passaic						1.95					.03				.01						.25					.32	*	.15				2.71
Layton	Delaware						1.63												.11			.03	.21				.23		T.				2.21
Long Valley	Morris						1.87	.13															.38	.05			.15	.04		.20			2.82
Newton	Delaware						1.36	09					.17			.02			.08			.05	.27				.17	T.	.06				2.27
Phillipsburg	...do																																
Sussex	Hudson						1.59															.09	.69	.02			.34						2.73
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic	T.					2.02	.25					T.				T.						.17	.01			.01	.21	.04	T.			2.71
Canoe Brook ‖‖	Essex	.01					2.21	.17															.69				.18		.08				3.34
Chatham ‖‖	...do	.04					2.27	.21															.49	.04			.01	.31	.06				3.43
Elizabeth	Coast	.02					2.04															.03	.19	.01			.39	.02	.05				2.75
Flemington	Raritan						1.90												T.			.02	.12	.02			.16	.05	.08				2.35
Jersey City	Coast					.02	1.71						T.									T.	.20				.44	.04	T.				2.41
Lambertville	Delaware						1.58															.01	.29				.25	.22	.27				2.62
Little Falls. ‖‖	Passaic	.01					2.03	.15					.01										.33	.02			.02	.37	.05				2.99
New Brunswick	Raritan	.08				T.	2.65															T.	.26	T.		T	.19	.06	.06				3.30
New Milford ‖‖	Hackensack						1.48	.29					.06										.15	.04				.57	.03				2.62
Paterson	Passaic						1.75	T.														.04	.19				.51	.02	T.				2.51
Plainfield	Raritan					.02	2.11															T.	.27				.20	.09	.01				2.70
Ridgefield**	Hackensack					*	2.16					T.										.02	.50	T.			.64	.04	T.				3.36
Somerville	Raritan																																
Woodcliff Lake ‖‖	Hackensack						1.19	.45					.05										.18					.60					2.47
New York, N. Y***	Coast					.18	1.42					T.										.05	.14	.01			.43	.04	T				2.27
The Southern Interior.																																	
Belleplain	Tuckahoe																																
Bridgeton	Delaware					1.88	.48												.03								.10	.08	T.			.25	2.82
Burlington	Delaware						1.55												T.				.50				.20	.30	.50				3.05
Camden**	...do					.64	.61															.04					.10	.09	T.				1.48
Freehold	Raritan						1.45																T.				.26		.05				1.76
Hammonton	Mullica					1.87	.32															.28					.07	.08				.30	2.92
Hightstown	Raritan					T.	1.94															T.	.42				.25	.05	T.				2.66
Indian Mills	Mullica					T.	2.10																.06				.14	.16	T.				2.46
Lakewood	Metedeconk					T.	1.75																.40				.20	.02	T.			T.	2.37
Moorestown ‖‖	Delaware						1.25	.18											T.				.22					.17	.28				2.10
Northfield	Coast					.30	1.40																.15				.07	.06					1.98
Pemberton	Delaware					T.	1.50	.02															.11	T.			.22	.07	T.				1.92
Pleasantville ‖‖	Coast	.16					1.35	.32											T.				.15					.08	.03				2.09
Port Norris	Maurice						2.20																.08				.05						2.33
Runyon	Coast						1.86																.63	.03			.28		.11				2.91
Trenton***	Delaware					.26	1.47	T.											.01			.17	.01				.16	.07	T	T.			2.15
Trenton No. 2 ‖‖	...do	T.					1.77	.13											.01				.19					.17	.07	T			2.34
Tuckerton	Coast					.06	.34	.80												.05		.02				.02	.06	.11	T.			.02	1.48
Phila., Pa***	Delaware					.48	.80												T.			.08					.07	.11	T.				1.54
The Sea Coast.																																	
Asbury Park	Coast																																
Atlantic City***	...do				T.	1.11	.32												T.	T.		T.	.03				.06	.05	T.				1.57
Long Branch**	...do.					.16	1.51									T.			T			.14	.34				.25	.05	.01	T		T.	2.46
Sandy Hook***	...do					.14	1.30					T				T.			T.			.20	.17	.01			.29	.04	T.				2.15

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.06	30.40	17	29.59	12	15.7	35	nw.	28	75	59	69	61
Long Branch	30.04	30.43	4	29.51	11					75	51	68	64
New York, N. Y	30.03	30.46	5	29.52	11	14.7	46	nw.	28	70	55	66	61
Philadelphia, Pa	30.07	30.46	4	29.59	11	12.4	33	n.	12	71	51	63	63
Ridgefield	30.03	30.45	5	29.51	11								
Sandy Hook	30.03	30.44	4	29.55	11	14.8	37	nw.	12	73	59	70	56
Trenton	30.04	30.44	4	29.56	11	9.3	30	nw.	26	75	52	66	54

Daily Temperatures for October, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	64	70	78	69	64	63	71	75	73	60	78	64	54	62	75	68	63	71	63	55	57	64	69	68	69	56	54	47	51	53	58	64.1
	Minimum	44	36	40	47	45	54	47	42	46	40	45	39	32	31	34	47	45	44	42	33	33	48	52	44	48	46	39	33	32	27	28	40.7
Charlotteburg	Maximum	78	64	75	75	71	65	67	72	71	64	75	75	64	55	68	65	65	72	68	58	54	64	64	64	68	68	52	48	50	57	56	64.9
	Minimum	42	31	34	46	38	54	50	43	49	30	42	42	30	38	33	38	35	42	42	33	28	45	50	46	28	37	39	32	30	28	25	38.1
Dover	Maximum	61	64	70	63	58	65	65	70	66	55	73	60	50	50	65	62	63	71	58	49	62	....	64	62	65	52	47	43	50	50	55	59.6ª
	Minimum	40	35	38	49	43	55	47	43	45	36	45	35	32	30	56	42	39	45	38	33	31	37	51	44	33	42	39	33	32	32	26	39.5
Layton	Maximum	62	65	71	65	60	63	67	75	66	52	76	69	51	57	64	65	61	72	57	52	52	63	65	69	63	51	47	45	52	52	58	60.9
	Minimum	38	32	35	41	38	52	48	36	39	29	32	37	30	23	28	40	37	42	38	30	27	43	51	41	34	36	40	32	30	25	22	35.7
Long Valley	Maximum	68	65	73	65	60	64	65	70	67	58	73	68	49	55	68	63	63	70	66	60	56	63	66	63	65	53	54	48	49	48	57	61.7
	Minimum	43	32	35	47	43	53	52	37	43	36	38	40	32	28	31	47	38	42	42	31	29	49	51	50	30	39	42	32	29	31	23	38.5
Newton	Maximum	65	65	74	64	59	64	67	74	68	56	76	74	49	56	66	62	61	78	59	52	53	65	65	74	68	54	54	51	53	49	58	62.4
	Minimum	42	39	40	46	40	50	49	40	50	35	40	36	30	32	36	44	42	43	40	32	38	44	50	45	38	44	39	32	31	30	30	39.6
Phillipsburg	Maximum	61	65	72	65	61	63	68	72	70	53	76	65	53	62	74	64	64	72	58	53	57	63	66	64	64	57	50	46	52	51	57	61.9
	Minimum	45	37	42	50	47	55	49	44	48	44	41	38	35	38	31	48	48	46	42	34	34	50	50	44	39	46	38	34	34	31	29	41.6
Sussex	Maximum	67	71	79	69	61	62	67	77	66	56	79	78	54	58	70	65	60	71	62	57	52	62	65	71	73	60	52	45	60	48	57	63.7
	Minimum	44	34	39	47	43	52	50	36	53	36	38	43	32	29	35	42	35	42	37	36	38	44	52	39	43	41	41	34	32	30	30	39.6
The Red Sandstone Plain.																																	
Boonton§§	Maximum	62	66	74	67	61	66	68	71	69	56	74	53	50	57	67	65	65	71	60	52	58	65	66	65	67	56	49	47	51	51	55	61.4
	Minimum	47	36	36	43	43	49	55	46	48	36	41	49	33	32	36	41	38	41	45	36	32	39	53	48	31	35	43	36	34	37	27	40.2
Canoe Brook§§	Maximum	62	66	75	66	62	66	68	73	70	67	76	67	52	58	69	66	74	71	71	54	59	62	68	60	66	58	50	48	52	52	58	63.4
	Minimum	45	34	39	43	39	56	50	37	42	33	40	47	33	23	28	37	34	41	45	30	28	49	49	42	38	36	41	34	32	25	24	37.9
Elizabeth	Maximum	67	52	59	62	60	70	73	66	65	56	71	67	45	52	61	61	59	66	72	54	54	62	62	61	56	62	57	45	47	43	56	59.5
	Minimum	49	42	41	52	47	57	53	44	48	41	44	45	34	32	35	48	40	46	47	34	34	51	51	49	37	43	42	35	34	29	30	42.4
Flemington	Maximum	73	70	77	67	62	65	73	76	72	64	80	72	51	61	76	68	70	75	71	56	63	71	67	68	73	61	53	50	54	56	61	66.3
	Minimum	46	39	40	51	47	55	53	45	49	44	44	46	34	32	36	48	42	44	46	33	33	52	53	50	33	42	40	34	32	33	28	42.1
Jersey City	Maximum	61	66	74	66	63	67	68	72	70	58	75	59	50	59	69	64	68	71	58	52	59	67	63	64	67	55	50	46	53	52	59	62.1
	Minimum	49	47	50	52	50	60	54	50	52	50	50	40	35	37	44	51	48	51	46	37	39	51	53	52	47	45	41	36	35	36	40	46.1
Lambertville	Maximum	66	66	72	65	61	65	66	72	62	57	76	67	52	57	70	65	67	73	65	54	62	65	65	62	69	53	52	45	52	51	60	62.4
	Minimum	48	41	44	49	45	53	51	46	51	44	46	39	32	31	38	49	42	49	43	31	33	49	51	48	38	47	38	33	31	34	32	42.1
Little Falls§§	Maximum	64	68	79	69	63	67	70	74	72	62	77	61	51	60	70	68	70	73	61	56	59	67	66	67	71	52	53	48	53	54	58	64.0
	Minimum	46	37	40	48	43	54	53	43	47	36	43	50	35	30	33	42	37	46	45	34	31	34	51	46	34	40	43	36	33	31	28	40.3
New Brunswick	Maximum	72	66	73	68	61	68	67	72	69	64	77	72	49	58	69	63	67	72	68	54	58	64	65	61	68	58	52	46	53	51	58	63.3
	Minimum	47	42	41	51	47	55	54	44	49	43	47	44	35	31	36	49	40	48	46	33	34	52	53	48	37	44	40	34	34	30	31	42.5
Paterson	Maximum	67	64	71	64	60	66	67	72	67	57	75	....	69	56	68	62	67	72	63	50	56	64	66	64	68	53	51	45	53	54	59	62.3ª
	Minimum	46	39	40	50	44	56	54	43	47	37	43	....	35	35	37	44	39	47	45	36	36	50	53	43	35	39	42	37	33	30	29	41.5ª
Plainfield	Maximum	65	66	75	66	63	66	69	74	72	55	77	58	54	61	71	64	70	74	61	53	59	69	65	64	68	53	51	47	53	54	59	63.1
	Minimum	46	42	41	51	48	59	51	44	48	40	48	40	34	30	36	49	40	47	47	35	36	51	53	51	36	43	41	35	34	30	29	42.4
Ridgefield	Maximum	60	65	74	65	60	66	68	74	69	57	76	54	50	59	68	63	67	70	56	62	57	65	63	63	66	51	50	45	53	52	58	61.2
	Minimum	44	41	42	50	44	57	50	48	45	39	47	37	34	31	41	46	41	50	38	36	34	52	53	44	36	45	41	36	33	34	36	42.1
Somerville	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
New York, N. Y.	Maximum	59	65	73	66	63	68	67	70	69	58	74	60	49	57	67	65	66	69	56	51	58	65	61	64	66	56	49	44	52	51	58	61.2
	Minimum	50	47	50	53	50	60	55	51	53	50	50	38	35	37	45	52	49	52	41	38	40	50	52	52	49	46	41	37	35	37	41	46.3
The Southern Interior.																																	
Belleplain	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Bridgeton	Maximum	66	72	77	66	65	67	70	72	77	65	77	61	54	58	69	68	62	73	61	59	67	69	68	60	69	58	50	41	57	54	62	64.3
	Minimum	45	42	44	51	58	52	45	49	47	49	52	31	33	37	44	42	50	45	32	33	48	48	49	37	46	38	35	36	29	33	40	42.6
Burlington	Maximum	72	68	74	70	63	65	69	75	74	61	78	70	52	57	82	80	70	74	65	56	67	67	71	66	70	60	57	48	55	54	61	66.2
	Minimum	48	46	42	57	54	57	56	44	50	47	48	45	33	33	66	46	40	45	46	34	31	51	54	49	36	44	41	37	36	29	31	44.4
Camden	Maximum	67	71	73	76	64	66	69	75	70	61	79	62	52	57	70	70	72	76	59	57	71	69	66	60	71	58	50	47	55	55	63	64.9
	Minimum	42	42	43	38	50	58	55	48	51	50	48	38	34	36	40	45	36	38	35	34	32	53	55	42	35	40	39	34	37	34	32	41.7
Freehold	Maximum	71	65	73	61	62	71	66	72	70	57	76	66	51	56	70	65	69	73	66	55	66	66	65	59	67	54	51	51	52	52	60	63.2
	Minimum	48	40	42	51	51	59	54	46	50	44	49	44	31	29	38	50	40	49	44	32	32	45	51	48	35	43	46	34	32	31	32	42.6
Hammonton	Maximum	63	70	74	65	68	71	69	75	73	67	77	61	52	57	69	69	72	76	69	58	68	69	67	60	70	57	49	46	55	54	63	64.9
	Minimum	47	43	51	53	58	53	46	51	49	51	53	32	32	38	45	43	47	46	33	34	50	50	47	42	47	40	34	32	31	35	43	43.7
Hightstown	Maximum	70	68	73	61	62	69	64	70	69	59	76	67	53	57	65	63	70	73	64	55	56	62	67	61	67	54	52	46	54	52	61	62.6
	Minimum	47	41	40	40	48	57	54	46	50	42	48	42	33	31	38	43	39	48	46	33	31	50	52	49	35	44	39	34	33	32	30	42.1
Indian Mills	Maximum	70	71	74	65	65	70	68	76	70	63	79	71	51	56	70	69	73	78	69	57	68	69	65	62	71	61	55	48	56	55	64	65.8
	Minimum	50	41	36	47	55	59	51	41	46	46	48	50	31	29	32	52	48	45	45	30	38	51	50	49	34	40	35	32	30	30	28	41.9
Lakewood	Maximum	74	62	70	61	62	73	66	71	68	58	75	68	54	55	68	64	64	73	65	55	60	65	65	61	62	56	52	45	53	50	60	62.5
	Minimum	46	45	38	48	57	61	57	45	49	43	48	46	44	31	37	47	37	45	48	32	28	51	53	48	36	40	42	37	32	27	28	42.8
Moorestown	Maximum	61	68	72	62	63	65	67	74	71	59	76	57	52	57	67	65	69	73	59	56	67	66	65	65	69	56	49	45	54	52	61	62.6
	Minimum	47	46	42	53	51	58	55	47	50	47	51	38	33	35	38	45	46	50	39	34	32	49	44	44	35	49	43	37	36	33	30	43.1
Pemberton	Maximum	72	69	74	65	63	69	69	74	72	60	77	68	59	59	69	67	73	76	68	68	66	68	67	60	72	57	54	50	55	54	63	65.7
	Minimum	51	46	40	50	53	60	56	44	50	46	50	48	32	32	37	46	40	47	46	34	31	52	55	50	35	47	41	35	33	30	32	43.5
Pleasantville§§	Maximum	60	66	71	65	69	74	70	75	73	64	78	62	51	57	71	63	65	73	58	60	66	70	65	56	63	60	51	50	57	55	61	63.8
	Minimum	50	45	39	46	58	61	55	42	50	46	49	52	29	28	34	41	40	44	47	32	27	50	50	49	36	43	39	31	30	27	25	41.8
Runyon	Maximum	75	69	74	72	68	69	75	74	78	72	79	69	69	70	74	69	70	74	74	72	64	68	77	65	67	68	56	54	54	54	54	68.6
	Minimum	46	38	35	42	44	46	42	34	35	36	38	34	31	25	34	35	34	38	32	29	25	52	50	30	34	35	40	35	33	21	23	35.7
Trenton	Maximum	60	67	72	60	62	66	67	74	69	57	77	65	52	56	70	63	68	73	58	54	64	65	66	60	67	56	49	45	53	53	59	62.2
	Minimum	47	45	45	52	49	57	55	49	53	47	48	37	35	35	40	50	46	48	41	34	37	50	52	48	43	58	39	35	36	34	35	44.2
Tuckerton	Maximum	60	63	64	60	64	76	73	75	75	74	70	68	50	55	70	70	68	75	75	62	64	72	65	64	62	64	60	51	56	60	61	65.3
	Minimum	48	48	46	48	50	56	58	60	65	62	52	60	30	40	50	52	54	50	55	40	50	60	52	58	52	51	46	36	38	36	42	49.8
Philadelphia, Pa.	Maximum	63	69	75	66	65	65	71	74	73	60	78	68	52	57	71	68	69	72	60	56	68	67	67	62	68	59	51	47	54	53	60	64.1
	Minimum	51	51	52	55	52	59	56	53	59	52	54	40	37	37	43	52	51	54	46	36	42	52	55	52	48	51	40	38	39	38	41	47.9
The Sea Coast.																																	
Asbury Park	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Atlantic City	Maximum	63	64	68	65	66	73	70	73	71	63	76	67	52	58	69	62	65	67	61	54	64	71	64	57	62	60	51	47	56	54	59	63.0
	Minimum	53	50	50	56	61	64	57	52	55	52	59	40	35	36	45	52	50	59	43	37	43	54	52	48	44	47	39	37	40	38	50	48.3
Long Branch	Maximum	59	61	71	60	64	70	67	73	66	56	76	57	50	57	69	57	63	73	56	55	59	66	63	55	61	57	49	44	51	49	54	60.3
	Minimum	52	45	43	51	56	63	52	47	49	51	50	37	35	32	38	42	40	49	43	34	34	52	54	41	38	46	39	35	35	32	34	43.5
Sandy Hook	Maximum	62	63	70	63	63	68	66	71	68	58	74	62	50	57	65	58	62	69	56	53	59	63	62	57	62	58	50	46	52	52	58	60.5
	Minimum	52	53	53	55	54	63	57	54	58	51	53	41	38	40	46	52	50	53	46	41	44	54	55	52	49	50	42	39	39	39	43	48.9

ª, ᵇ, ᶜ, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook**	Evaporation	.112	.080	.096	.120	.034	.034	.136	.112	.120	.032	.112	.152	.096	.080	.056	.096	.080	.048	.064	.048	.018	.048	.096	.064	*	.036	*	.112	.080	.048	.016	2.226
	Wind movement	19	12	7	10	23	14	16	25	18	9	6	34	47	29	20	13	12	15	24	14	7	15	25	20	9	26	38	42	6	8	21	564
Pleasantville**	Evaporation	.160	.112	.160	.032	.070	*	.224	.160	.144	.064	.160	.160	.160	.096	.176	.064	.064	.064	.096	.112	.038	.144	.128	.064	.048	.016	*	.174	.080	*	.052	3.022
	Wind movement	51	55	34	41	72	61	81	19	31	43	28	69	94	75	45	32	45	29	53	55	24	46	57	85	47	38	94	77	39	47	27	1594
Runyon	Evaporation	.120	.090	.090	.060	.060	.060	.080	.080	.080	.080	.080	.090	090	.090	.090	.060	.060	.060	.090	090	.060	.090	.030	.060	.060	.040	*	.110	.090	.080	.080	2.300
	Wind movement	17	15	10	37	31	34	42	39	17	16	17	24	32	34	26	19	17	12	20	14	12	26	25	14	19	14	20	80	72	27	21	803

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day. *** Pan overflowed.

51.05
NNJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. NOVEMBER, 1934. No. 11.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein

A HALF CENTURY OF SERVICE.

William C. Harris has completed fifty years of faithful and efficient public service as Cooperative Observer at Dover. He started to keep a daily record of the weather in 1880 and became associated with the Bureau during 1885 when he was supplied with standard instruments.

This record of service is unequalled in New Jersey.

GENERAL SUMMARY.

The temperature average made this November the third warmest since 1900, the two warmest being those of 1902 and 1931. The average for the second half of the month was about seven degrees higher than of the first half, contrary to the usual rule of gradually lowering averages at this season of the year. The highest temperatures were recorded mostly on the 20th and were in the seventies, while the lowest were close to the 20-degree mark and were registered mostly on the 15th with a few on the 3d and 14th.

The precipitation averaged a little below normal over the State, except in the Highlands and in the central-south portion, the State average, in percentage of the normal, being 92. For the various districts the percentages were as follows: The Highlands, 131; Red Sandstone Plain, 78; Southern Interior, 92; Sea Coast, 81. Rain came rather frequently. The longest dry period was from the 14th to 20th, inclusive. During the other portions of the month the periods between rains usually amounted to only one or two days. Light snow occurred at all stations except in the extreme southern portion but was of measurable amounts at only a few stations in the extreme north portion.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 38 stations, was 47.3°, which was 3.7° above normal. The highest temperature was 80° at Indian Mills on the 20th, and the lowest, 10°, at Runyon on the 15th. The greatest daily range of temperature was 45° at Layton on the 17th and at Runyon on the 3d. The highest monthly mean temperature was 51.4° at Belleplain, and the lowest 43.6° at Boonton and Layton.

The temperature departure from the normal for the year, 1934, to date, by sections, is: The Highlands, +0.6°; Red Sandstone Plain, —0.1°; Southern Interior, —0.2°; Sea Coast, 0.0°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 45 stations, was 2.91 inches, which was 0.27 inch below normal. The average total snowfall at 20 selected station was a 0.1 inch, which was 1.0 inch below normal. The greatest monthly precipitation was 5.00 inches, at Charlotteburg, and the least, 1.30 inches at Runyon. The greatest amount of precipitation in any 24 consecutive hours was 1.60 inches at Charlotteburg on the 30th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 11, or 3 more than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands. +2.97 inches; Red Sandstone Plain, +2.88 inches; Southern Interior, +0.44 inch; Sea Coast, —2.80 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 14 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 52 miles per hour from the south at Atlantic City on the 4th.

MISCELLANEOUS.

The per cent of possible sunshine was 49, or 9 per cent below normal.

The mean atmospheric pressure, reduced to sea level, was 30.13 inches, or 0.03 inch above normal. The highest reading was 30.67 inches at Ridgefield and Long Branch on the 26th, and the lowest 29.43 inches at Ridgefield on the 7th.

The mean stage of the Delaware River at Phillipsburg was 3.1 feet, and the highest 5.6 feet on the 6th. At Trenton the mean stage was 2.0 feet, and the highest 3.3 on the 7th.

Thunderstorms occurred at a few places in the State on the 1st, 4th, 5th and 6th. Dense fog occurred on the 5th, 21st, 28th and 30th at widely scattered portions of the State. Hail was noted at Atlantic City on the 6th. A light fall of sleet was noted on the 12th and 13th at Dover.

COMPARATIVE DATA FOR NOVEMBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest. monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885........	44.8	+1.2	76	18	4.53	+1.35	7.90	2.27	......	....	....	....	....
1886........	44.5	+0.9	73	17	4.49	+1.31	6.24	3.45	......	....	....	....	....
1887........	41.5	−2.1	72	13	1.94	−1.24	2.60	0.95	......	6	....	....	....
1888........	45.8	+2.2	77	8	3.97	+0.79	5.41	2.66	......	10	....	....	....
1889........	45.7	+2.1	69	13	8.48	+5.30	11.45	4.70	......	13	....	....	....
1890........	43.8	+0.2	74	11	0.82	−2.36	1.10	0.38	......	8	13	12	5
1891........	42.2	−1.4	70	6	2.39	−0.79	3.47	1.54	......	4	12	10	8
1892........	41.9	−1.7	71	12	7.29	+4.11	9.49	4.74	......	11	8	9	13
1893........	41.8	−1.8	70	11	3.48	+0.30	4.53	2.19	......	7	10	11	9
1894........	40.3	−3.3	76	11	3.34	+0.16	5.12	1.77	....	10	13	7	10
1895........	45.7	+2.1	80	12	3.17	−0.01	5.10	1.56	0	10	12	7	11
1896........	48.2	+4.6	78	12	3.05	−0.13	5.68	1.37	3.2	8	9	9	12
1897........	43.8	+0.2	74	10	4.59	+1.41	5.95	2.42	1.3	12	8	11	11
1898........	42.4	−1.2	70	11	6.76	+3.58	9.07	3.83	14.7	14	10	9	11
1899........	44.0	+0.4	71	17	2.29	−0.89	4.32	0.72	1.1	7	15	8	7
1900........	47.5	+3.9	79	15	3.43	+0.25	5.54	1.82	T.	9	9	10	11
1901........	38.5	−5.1	69	10	2.38	−0.80	4.23	1.18	0.8	6	12	9	9
1902........	49.3	+5.7	80	20	2.20	−0.98	4.17	0.87	0.2	8	10	11	9
1903........	39.9	−3.7	79	3	1.26	−1.92	2.03	0.75	T.	6	16	8	6
1904........	40.2	−3.4	69	6	2.18	−1.00	3.40	1.30	1.6	6	12	10	8
1905........	42.1	−1.5	70	6	1.84	−1.34	2.86	0.54	0.1	6	12	10	8
1906........	43.6	0.0	70	8	1.61	−1.57	2.52	1.06	2.3	6	16	7	7
1907........	43.5	−0.1	68	13	5.65	+2.47	6.95	4.19	0.8	13	10	8	12
1908........	43.1	−0.5	72	2	0.96	−2.22	1.29	0.35	2.2	4	14	8	8
1909........	46.4	+2.8	80	12	2.36	−0.82	4.33	1.32	2.1	8	13	8	9
1910..	40.4	−3.2	71	13	3.79	+0.61	5.73	1.63	1.4	9	5	13	12
1911........	41.3	−2.3	73	13	5.17	+1.99	6.50	3.17	1.7	10	8	11	11
1912........	45.3	+1.7	76	11	3.43	+0.25	8.12	2.02	1.3	6	15	8	7
1913........	46.2	+2.6	77	21	2.71	−0.47	4.89	1.00	T.	7	14	7	9
1914........	43.3	−0.3	80	6	2.60	−0.58	4.81	1.21	0.7	6	16	8	6
1915........	44.0	+0.4	75	17	1.69	−1.49	3.11	0.96	0	8	14	8	8
1916........	43.3	−0.3	75	12	2.11	−1.07	3.81	0.80	T.	8	16	5	9
1917........	39.8	−3.8	68	9	0.56	−2.62	1.15	0.18	0.7	3	19	5	6
1918........	43.9	+0.3	71	12	1.87	−1.31	3.05	0.49	0	7	14	6	10
1919........	43.7	+0.1	76	13	3.74	+0.56	6.18	1.98	T.	11	13	7	10
1920........	43.0	−0.6	74	12	4.41	+1.23	7.90	2.14	0.2	10	9	6	15
1921........	44.3	+0.7	79	18	4.26	+1.08	6.69	2.79	0.1	14	9	6	15
1922........	44.3	+0.7	73	13	0.91	−2.27	1.56	0.49	0.2	6	13	8	9
1923........	43.1	−0.5	72	11	2.51	−0.67	4.09	1.10	0	7	11	8	11
1924........	42.9	−0.7	77	1	2.03	−1.15	3.23	1.17	1.3	5	14	8	8
1925........	42.0	−1.6	76	10	3.40	+0.22	5.10	2.48	0.7	9	14	8	8
1926........	42.5	−1.1	76	8	4.04	+0.86	7.19	2.44	T.	9	13	8	9
1927........	47.9	+4.3	78	15	4.02	+0.84	8.68	1.74	0.1	11	10	8	12
1928........	45.1	+1.5	78	13	1.90	−1.28	2.76	1.20	0.3	9	10	9	11
1929........	44.5	+0.9	83	4	2.73	−0.45	3.64	2.08	0.4	10	10	7	13
1930........	44.1	+0.5	73	2	3.70	+0.52	6.54	1.41	0.2	9	12	6	12
1931........	50.3	+6.7	80	14	0.82	−2.36	1.19	0.42	1.6	6	12	7	11
1932........	42.0	−1.6	71	3	7.81	+4.63	12.66	3.92	T.	9	14	6	10
1933........	40.6	−3.0	78	7	1.01	−2.17	1.89	0.08	0.6	7	13	7	10
1934........	47.3	+3.7	80	10	2.91	−0.27	5.00	1.30	0.1	11	12	6	12
Period.....	43.6	....	83	1	3.18	....	12.66	0.08	1.1	8	12	8	10

W. B. O. Philadelphia-1-8-35-1050

Climatological Data for November, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	45.4^{d}	+4.0	72	20	25	3†	31	3.73	+0.54	0.95	T.	13	14	2	14	......	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	46.5	+6.1	74	20†	25	26	38	5.00	+1.38	1.60	0.6	13	12	6	12	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	......	.....	......	......	21	15†	....	3.49	+0.39	1.00	2.4	11	14	5	11	e.	Brice E. Riker.
Dover	Morris	600	50	45.1	+4.7	73	20	20	15	34	4.40	+0.85	1.40	T.	14	5	13	12	......	William C. Harris
Layton	Sussex	480	33	43.6	+4.3	78	20	13	15	45	3.99	+0.92	1.15	0.8	12	8	5	17	sw.	A. M. Depue.
Long Valley	Morris	520	4	43.8	....	68	23	20	3†	31	4.83	....	1.20	T.	11	14	6	10	w.	S. N .Dilts.
Newton	Sussex	769	51	45.0	+4.2	76	20	20	26	33	4.63	+1.56	1 01	T	15	6	3	21	nw.	Irving J. Kern.
Phillipsburg	Warren	363	§51	45.4	+3.6	71	20	23	15	31	3.77	+0.94	1.06	T.	12	12	6	12	......	Town Engineer.
Sussex	Sussex	442	39	46.9^{d}	+5.7	77	20	20	3	36	4.31	+1.49	1.38	1.1	9	14	5	11	......	A. J. W. Mowatt
Means and extremes	......	......	....	45.2	+4.7	78	20	13	15	45	4.24	+1.01	1.60	0.5	12	11	6	13	w.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	43.6	+2.4	74	20	20	15	39	3.22	+0.21	1.20	......	14	13	2	15	ne.	John Kline.
Canoe Brook	Essex	173	4	45.0	....	76	20	14	15	41	2.16	... .	0.70	......	14	11	7	12	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30	......	.....	......	......	......	......	....	2.53	−0.91	0.74	T.	15	14	7	9	......	Paul Molitor, Sr.
Elizabeth	Union	45	55	46.4^{b}	+2.6	67	21	19	15	30	1.68	−1.24	0.43	T.	12	16	3	11	sw.	Union County Park Comm.
Flemington	Hunterdon	140	§48	47.8	+4.5	78	20	20	15	39	2.93	−0.02	1.08	T.	10	14	7	9	nw.	Hiram E. Deats.
Jersey City	Hudson	10	36	48.6	+4.1	75	20	25	15	27	1.74	−1.26	0.49	T.	11	11	5	14	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	47	46.7	+3.6	75	18	20	14	34	2.36	−0.64	0.86	T.	12	16	3	11	sw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	46.9	+4.9	77	20	19	15	37	2.82	−0.58	1.01	T.	16	13	5	12	nw.	Passaic Valley Water Co
New Brunswick	Middlesex	110	81	47.6	+4.0	76	20	21	15	32	1.89	−0.95	0.64	T.	9	12	8	10	sw.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	......	....	......	......	......	......	....	1.91	−1.30	0.53	......	12	....	....	....	......	Hackensack Water Co
Paterson	Passaic	80	64	46.6	+2.9	76	20	18	15	36	3.01	−0.11	1.02	T.	13	12	5	13	w.	William H. Meyer.
Plainfield	Union	120	46	47.6	+5.0	77	20	23	15	33	2.13	−0.92	0.85	T.	12	9	6	15	nw.	S. K .Pearson.
Ridgefield	Bergen	80	17	47.0	+5.2	75	20	21	15	28	2.44	−0.40	0.60	T.	13	9	8	13	nw.	George P. Kirsten.
Somerville	Somerset	70	51	46.2^{f}	+3.5	75	20	17	15	36	2.45	−0.52	0.79	T	10	12	7	11	nw.	Louis L. Miller.
Woodcliff Lake‡‡	Bergen	100	16	......	....	......	......	......	......	....	2.37	−0.66	0.49	......	12	....	....	....	......	Hackensack Water Co.
New York, N.Y	......	314	64	48.2	+4.0	74	20	25	14	26	1.69	−1.27	0.49	T.	12	9	7	14	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	46.7	+3.9	78	20	14	15	41	2.38	−0.66	1.20	T.	12	12	6	12	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	51.4^{a}	+7.0	76	20	22	3	35	2.50	−0.04	1.00	0	5	15	4	11	s.	Mrs. Edward C. Hoffman.
Bridgeton	Cumberland	30	51	48.6	+2.9	74	20	21	14	33	3.37	+0.77	0.99	0	8	16	4	10	se.	Bennett K. Matlack
Burlington	Burlington	12	§48	49.6	+4.9	74	20	25	3	35	3.36	+0.38	0.70	0	9	16	4	10	sw.	Public Service Power Co.
Camden	Camden	20	2	48.4	....	76	20	25	3	34	2.59	....	0.98	0	10	7	9	14	nw.	Central Airport, Inc.
Freehold	Monmouth	194	¶30	47.5	....	76	20	20	15	29	2.43	−1.59	0.61	0	10	16	3	11	w.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	49.2	....	79	20	21	14	32	3.43	+0.39	0.94	0	13	17	7	6	w.	Geo. W. Lobley.
Hightstown	Mercer	110	41	48.1	+4.6	78	20	22	15	33	2.00	−0.84	0.57	T.	10	10	8	12	nw.	Braun Bros.
Indian Mills‡‡	Burlington	76	45	48.4	+4.9	80	20	17	15	42	3.56	+0.56	1.02	0	8	10	10	10	nw.	James M. Armstrong.
Lakewood	Ocean	54	30	47.6	+4.4	71	20	22	15	34	3.36	+0.27	0.90	T.	9	14	2	14	nw.	R. W. Holman.
Moorestown	Burlington	62	71	47.8	+4.9	75	20	23	15	38	1.96	−0.95	0.66	0	12	13	5	12	s.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	27	......	....	.....	......	......	......	....	2.68	−0.03	1.20	0	7	....	....	....	......	William L. Flick.
Pemberton	Burlington	55	4	49.4	....	79	20	22	15	36	3.11	....	0.95	T.	10	16	3	11	sw.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	47.3	+2.8	71	18	18	15	41	2.80	−0.02	1.13	......	10	17	3	10	s.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	......	....	......	......	......	......	....	3.43	....	0.88	0	7	18	6	6	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	45.4	....	79	20	10	15	45	1.30	−1.88	0.32	......	7	17	5	8	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	48.1	+3.7	75	20	25	15	29	1.97	−0.76	0.77	T.	12	9	9	12	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	......	....	......	......	......	......	....	2.02	....	0.63	T.	15	....	....	....	......	Edward H. Ristow.
Tuckerton	Ocean	23	41	51.8	+7.1	70	6†	24	15	22	3.22	+0.22	1.11	T.	13	15	7	8	n.	John H. Brown.
Philadelphia, Pa	......	114	63	50.6	+4.9	75	20	28	15	23	2.64	−0.06	1.05	T.	11	10	6	14	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	48.6	+4.7	80	20	10	15	45	2.73	−0.25	1.20	T	10	14	6	10	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	......	....	......	......	......	......	....	......	....	......	......	....	....	....	....	......	S. W. Triano.
Atlantic City	Atlantic	52	61	49.6	+4.0	68	5	25	15	24	2.83	+0.01	1.45	T.	11	9	7	14	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	47.4	+3.2	72	19†	22	15	29	3.20	−0.36	0.93	T.	12	9	6	15	w.	William D. Martin.
Sandy Hook	Monmouth	22	36	48.4	+2.6	69	20	28	15	20	1.77	−1.48	0.57	T.	12	9	8	13	nw.	U. S. Weather Bureau.
Means and extremes	......	......	....	48.5	+3.3	72	19†	22	15	29	2.60	−0.61	1.45	T.	12	9	7	14	w.	
For the State	......	......	....	47.3	+3.7	80	20	10	15	45	2.91	−0.27	1.60	0.1	11	12	6	12	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, ^{a}, ^{b} ^{c}, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville; Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for November, 1934

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	.40	....	....	.95	....	.08	....	.10	....	....	.05	.05	.10	....	....	....	....	....	T.	....	....	.05	....	.80	....	....	.05	.10	.10	.90	....	3.73
Charlotteburg	Passaic	.45	....	....	1.25	....	.36	....	....	.20	....	.03	....	.06	....	....	....	....	....	....	....	.24	.10	....	.25	....	....	.30	.06	.10	1.60	....	5.00
Culvers Lake	Delaware	.43	....	....	....	.82	.04	....	....	....	....	....	.04	.20	....	....	....	....	....	....	....	....	T.	.10	.53	....	....	.03	.10	.20	1.00	....	3.49
Dover	Passaic	.47	....	....	1.19	....	.17	....	....	....	.05	....	.01	.05	....	....	....	....	....	.03	....	.08	.01	.50	....	....	....	.10	.09	.25	1.40	....	4.40
Layton	Delaware	.43	....	....	.92	....	.10	T	....	....	....	....	....	.08	T.	....	....	....	....	.04	....	.02	T.	.36	.47	....	....	.14	.11	.17	1.15	....	3.99
Long Valley	Morris	.48	....	....	1.03	....	.40	....	....	.04	....	....	.08	....	T.	....	....	....	....	....	....	.07	.05	....	.60	....	....	T.	.20	.68	1.20	....	4.83
Newton	Delaware	.45	....	....	.97	....	.04	.02	.06	.10	....	1.01	T	.07	T.	....	....	....	....	.02	....	T.	....	.37	.37	....	....	.10	.15	.10	.80	....	4.63
Phillipsburg	...do	.42	....	....	.98	....	.10	....	.04	....	T.	.03	T.	.07	....	....	....	....	....	T.	T.	T.	T	.43	.34	....	T.	.03	.14	.13	1.06	....	3.77
Sussex	Hudson	1.01	....	....	.68	....	....	....	T.	....	....	....	T.	.22	....	....	....	....	....	....	....	.19	....	*	.75	....	....	.04	.04	....	1.38	....	4.31
The Red Sandstone Plain.																																	
Boonton ‖‖	Passaic	.10	.24	....	.07	1.20	.31	.13	....	....	....	.07	....	....	.04	....	....	....	....	....	....	.02	.06	....	.30	....	....	T.	.02	.14	.52	....	3.22
Canoe Brook ‖‖	Essex	.08	.04	....	.06	.70	.23	T.	....	....	....	.13	....	....	.03	....	....	....	....	....	....	.03	.03	....	.41	....	....	.02	.06	.03	.31	....	2.16
Chatham ‖	....do	.08	.10	....	.08	.74	.13	.12	....	.02	....	.12	....	....	.07	....	....	....	....	....	....	.03	.21	....	.46	....	....	T.	.08	.05	.24	....	2.53
Elizabeth	Coast	.11	....	....	.43	....	.16	T.	....	....	....	.18	T.	.02	....	....	....	....	....	....	....	.08	.01	.01	.18	....	....	.02	.05	....	.43	....	1.68
Flemington	Raritan	.27	....	....	.63	....	.28	T.	....	.01	....	.07	T.	.03	....	....	....	....	....	....	....	T.	....	T.	.26	....	T	T.	.09	.21	1.08	....	2.93
Jersey City	Coast	.07	....	....	.27	....	.37	T.	T.	....	T.	.20	T.	.01	T.	....	....	....	....	....	....	.03	....	....	.22	....	.01	T.	.02	.05	.49	....	1.74
Lambertville	Delaware	.14	....	....	.61	....	....	....	....	....	....	....	T.	....	....	....	....	....	....	.10	.02	....	.33	....	.02	.02	.08	.07	.06	.05	.86	....	2.36
Little Falls ‖‖	Passaic	.10	.12	....	.06	.95	.40	.01	....	....	....	.11	....	....	.04	....	....	....	....	....	....	.06	.11	.01	.43	....	....	.03	.08	.03	.28	....	2.82
New Brunswick	Raritan	.10	....	....	.40	....	.27	....	....	....	....	.19	....	T.	....	....	....	....	....	....	....	.06	.01	T.	.21	....	T.	.01	T.	T.	.64	....	1.89
New Milford ‖‖	Hackensack	.12	.10	....	....	.53	.24	.15	....	.03	....	.12	....	....	.04	....	....	....	....	....	....	....	.07	....	.22	....	....	....	.03	....	.26	....	1.91
Paterson	Passaic	.27	....	....	.74	....	.37	....	....	.01	....	.09	....	.04	....	....	....	....	....	....	....	.08	.01	T.	.30	....	....	.01	.05	.02	1.02	....	3.01
Plainfield	Raritan	.13	....	....	.51	....	....	....	T.	....	.01	.14	T.	.02	....	....	....	....	....	....	....	.13	....	.01	.26	....	T.	.02	.02	.03	.85	....	2.13
Ridgefield**	Hackensack	.11	....	....	.40	....	.44	....	.01	....	*	.60	....	.03	....	....	....	....	....	T.	....	.05	....	T	.24	....	T.	.01	.01	.07	.47	....	2.44
Somerville	Raritan	.22	....	....	.52	....	.27	....	....	T.	.15	....	....	.01	....	....	....	....	....	....	....	.03	T.	....	.35	....	T.	....	.04	.07	.79	....	2.45
Woodcliff Lake ‖‖	Hackensack	.12	.19	....	....	.49	.27	.40	....	....	....	.10	....	....	.06	....	....	....	....	....	....	....	.08	....	.27	....	....	....	.03	.01	.35	....	2.37
New York, N. Y***	Coast	.07	....	....	.25	....	.38	T.	T.	....	.12	.07	T.	.01	T	....	....	....	....	....	T.	.03	....	.11	.11	....	T.	T.	.02	.08	.44	....	1.69
The Southern Interior.																																	
Belleplain	Tuckahoe	T.	....	....	.45	....	.70	....	....	....	....	.10	....	....	....	....	....	....	....	....	....	....	....	....	....	.70	....	....	....	....	1 00	....	2.50
Bridgeton	Delaware	....	....	....	.55	.35	.43	....	....	....	.17	....	....	....	....	....	....	....	....	....	T	....	....	.63	....	....	....	....	.12	.99	.13	....	3.37
Burlington	Delaware	.10	....	....	.50	....	.70	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.20	....	....	.34	....	.30	T.	.06	.50	.66	T.	3.36
Camden**	..do	.09	....	....	.33	....	.57	T.	T.	....	.13	....	....	....	....	....	....	....	....	....	....	....	....	.23	.18	....	T.	.02	.01	.05	.98	....	2.59
Freehold	Raritan	.16	....	....	.53	....	.61	....	....	....	....	.23	....	T.	....	....	....	....	....	....	....	.06	....	....	.25	....	.07	.05	.03	....	.44	....	2.43
Hammonton	Mullica	.02	....	.04	.94	.62	.15	....	....	....	.15	....	....	....	....	....	....	....	....	....	.01	.01	....	.55	....	....	.04	....	.04	.82	.04	....	3.43
Hightstown	Raritan	.15	....	....	.39	....	.41	T.	....	....	T.	.10	T.	T.	T.	....	....	....	....	....	....	.06	....	....	.26	....	.07	.05	T.	.01	.57	....	2.07
Indian Mills	Mullica	....	....	....	1.02	....	.98	....	....	....	....	.22	....	....	....	....	....	....	....	....	....	.03	....	....	.54	....	.03	T.	....	.12	.62	....	3.56
Lakewood	Metedeconk	.32	....	....	.90	....	.64	....	....	....	T.	.29	....	T.	....	....	....	....	....	....	....	....	....	....	.24	....	.03	T.	.04	.25	.65	....	3.36
Moorestown ‖‖	Delaware	.09	.04	....	.14	.24	.66	.10	....	....	....	.14	....	....	....	....	....	....	....	....	....	T.	.01	....	....	....	....	.39	.02	.04	.09	....	1.96
Northfield	Coast	.04	....	....	.44	....	.32	....	....	....	....	.19	....	....	....	....	....	....	....	....	....	....	....	....	.45	....	....	T.	....	.04	1.20	....	2.68
Pemberton	Delaware	.22	....	....	.78	....	.95	.02	....	....	T.	.16	T.	....	....	....	....	....	....	....	....	T.	....	....	.54	....	.01	T.	.01	.04	.38	....	3.11
Pleasantville ‖‖	Coast	.10	....	....	.01	.47	.32	.08	....	....	....	.17	....	....	.02	....	....	....	....	....	....	.01	T.	....	.48	....	....	.01	....	T.	1.13	....	2.80
Port Norris	Maurice	.15	....	....	.45	.55	.40	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	....	....	.86	....	....	....	....	.88	.14	....	3.43
Runyon	Coast	.19	....	....	.24	....	.32	....	....	....	....	.18	....	T.	....	....	....	....	....	....	....	.09	....	....	....	....	T.	.06	....	....	.22	....	1.30
Trenton***	Delaware	.09	....	....	.30	....	.36	T.	.01	....	.10	T.	T	T	....	....	....	....	....	T.	T.	.03	....	.10	.15	....	.01	T.	.01	.10	.71	....	1.97
Trenton No. 2 ‖‖	....do	.05	.09	....	.03	.60	.31	.15	T.	.02	....	.11	....	T.	T.	....	....	....	....	....	....	.02	.02	....	.28	....	....	.01	.04	.06	.23	....	2.02
Tuckerton	Coast	1.06	.04	....	.12	.06	.04	.02	....	....	.04	.10	....	.02	....	....	....	....	....	....	....	.04	....	....	.36	....	....	....	....	.21	1.11	....	3.22
Phila., Pa***	Delaware	.10	....	....	.42	....	.62	T.	T.	....	.08	....	T.	T.	....	....	....	....	....	....	....	.01	T.	.15	.17	....	.01	T.	.01	.34	.73	....	2.64
The Sea Coast.																																	
Asbury Park	Coast	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	......
Atlantic City***	....do	.07	....	....	.26	....	.38	T.	T.	....	.14	.07	....	.02	....	....	....	....	....	....	....	T.	....	.15	.22	....	.01	T.	....	.77	.74	....	2.83
Long Branch**	....do	.24	....	....	.93	....	.65	T	T.	....	.16	.11	T	.01	....	....	....	....	....	....	....	T.	....	.09	.11	....	.09	....	.02	.38	.41	....	3.20
Sandy Hook***	....do	.05	....	....	.25	....	.57	T	T.	....	.18	.09	....	T.	....	....	....	....	....	....	....	.01	....	.11	.11	....	.04	T.	.03	.12	.21	....	1.77

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.16	30.60	26	29.50	7	17.4	52	s.	4	77	66	72	57
Long Branch	30.13	30.67	26	29.44	7	......	......	......	......	73	64	69	41
New York, N. Y	30.13	30.68	26	29.43	7	15.7	61	nw.	1	73	62	67	46
Philadelphia, Pa	30.15	30.66	26	29.47	7	13.4	44	s.	4	73	60	66	51
Ridgefield	30.13	30.67	26	29.43	7	......	......	......	......	......	......	......	......
Sandy Hook	30.12	30.64	26	29.46	7	15.4	38	s.	4	78	67	73	43
Trenton	30.13	30.65	26	29.46	7	10.3	33	nw.	1	78	61	70	56

Daily Temperatures for November, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	64	51	56	65	66	52	55	57	49	47	50	45	37	37	37	52	61	65	....	72	53	....	....	....	45	37	43	56	60	65	....	53.2[d]
	Minimum	43	28	25	34	37	42	40	35	33	30	33	36	28	30	28	30	31	38	34	45	46	48	57	36	32	25	35	43	55	57	....	37.5
Charlotteburg	Maximum	56	48	54	64	68	65	54	56	56	49	49	46	38	38	44	49	63	68	72	74	74	66	66	63	55	45	43	50	59	64	....	56.5
	Minimum	39	28	29	42	40	36	39	40	33	26	39	30	29	26	30	34	35	43	34	48	43	45	49	41	26	25	30	31	50	55	....	36.5
Dover	Maximum	53	47	53	64	65	55	55	54	47	48	50	41	38	37	45	48	63	68	68	73	61	58	67	55	47	33	46	54	67	63	....	54.1
	Minimum	32	27	22	47	43	40	39	37	29	28	34	29	28	23	20	30	29	44	39	47	44	46	53	33	28	28	31	45	53	56	....	36.1
Laytou	Maximum	50	48	54	64	67	52	54	60	48	48	51	40	33	36	45	48	68	70	68	78	56	58	58	54	48	42	41	54	60	64	....	53.9
	Minimum	32	24	18	41	34	36	38	33	35	23	27	27	25	27	13	25	28	33	38	41	45	45	52	38	24	19	30	41	52	56	....	33.2
Long Valley	Maximum	53	45	53	63	67	50	55	54	51	48	45	44	38	38	44	48	64	67	64	58	55	62	68	49	46	42	46	55	58	64	....	53.0
	Minimum	37	27	20	32	39	38	40	34	33	26	28	31	27	28	20	22	34	36	35	44	44	47	50	36	28	24	30	42	53	52	....	34.6
Newton	Maximum	52	45	55	60	68	55	56	55	47	48	59	43	35	38	44	48	62	68	65	76	67	59	67	65	44	39	45	65	68	72	....	55.0
	Minimum	37	29	22	30	42	43	39	35	32	29	32	31	25	25	21	32	37	41	44	49	42	46	50	38	30	20	30	38	40	43	....	35.1
Phillipsburg	Maximum	50	51	53	64	60	53	57	55	46	49	49	42	39	39	45	51	60	65	64	71	52	65	68	54	47	38	44	55	60	64	....	53.7
	Minimum	39	30	26	45	38	43	42	36	32	39	35	34	30	27	23	21	29	38	38	43	47	50	53	36	31	26	35	44	53	36	....	37.0
Sussex	Maximum	51	46	56	63	67	59	55	56	49	48	49	43	35	37	....	47	....	69	67	77	63	60	71	....	47	....	41	53	60	63	....	55.1[d]
	Minimum	40	33	20	46	40	47	42	38	38	31	35	35	25	31	21	33	....	38	43	48	47	50	48	41	26	....	34	44	54	55	....	38.7[b]
The Red Sandstone Plain.																																	
Boonton§§	Maximum	54	54	56	66	65	53	55	54	47	49	49	41	38	33	41	30	59	60	67	74	52	59	69	53	46	38	47	54	57	65	....	52.8
	Minimum	30	27	22	27	40	33	42	39	36	28	32	33	30	31	20	24	27	30	38	41	40	45	48	42	29	27	29	38	47	53	....	34.4
Canoe Brook§§	Maximum	56	56	58	67	67	62	57	57	49	53	50	44	41	38	48	50	64	70	71	76	64	61	69	61	47	41	49	55	61	66	....	56.9
	Minimum	39	21	18	42	35	36	38	30	28	24	30	28	25	31	14	28	23	33	34	40	45	47	43	41	27	21	31	39	48	54	....	33.1
Elizabeth	Maximum	47	43	....	....	66	65	57	55	51	53	51	52	45	44	45	43	60	60	60	65	67	58	62	62	48	50	52	57	60	66	....	55.1[b]
	Minimum	43	27	26	26	43	47	41	37	35	32	36	33	28	30	19	32	30	39	40	46	47	50	53	42	32	33	35	49	42	54	....	37.6
Flemington	Maximum	56	53	61	67	68	58	59	60	53	51	55	46	41	41	52	57	68	73	72	78	58	66	68	64	48	43	46	55	59	67	....	58.1
	Minimum	40	30	25	42	39	44	41	39	31	29	34	32	30	31	20	32	29	39	39	45	47	50	50	39	31	29	43	45	53	56	....	37.5
Jersey City	Maximum	58	50	56	66	70	57	57	56	49	56	51	44	42	40	48	48	61	68	68	75	52	60	65	56	44	40	50	57	60	64	....	55.6
	Minimum	41	35	37	51	51	46	42	40	37	39	40	35	31	28	25	38	39	47	48	48	48	50	54	37	30	34	38	48	54	55	....	41.5
Lambertville	Maximum	54	47	58	65	67	55	55	45	50	49	45	39	42	45	51	63	69	75	59	66	67	61	47	37	46	57	59	59	58	64	....	55.1
	Minimum	40	29	29	46	47	39	37	32	30	35	34	28	28	20	34	36	44	41	46	50	55	36	28	27	31	44	53	42	52	57	....	38.3
Little Falls§§	Maximum	57	56	59	67	69	55	57	57	51	54	53	45	40	39	48	49	65	71	70	77	61	61	69	61	46	39	49	56	61	65	....	56.9
	Minimum	40	42	23	39	40	41	41	39	33	29	33	32	29	33	19	33	28	40	37	44	45	46	49	44	28	28	31	38	48	54	....	36.9
New Brunswick	Maximum	59	48	57	68	67	61	58	55	49	52	51	46	41	43	44	51	63	68	69	76	60	65	68	64	46	41	47	53	64	68	....	56.7
	Minimum	45	30	25	46	45	45	41	37	33	32	36	32	28	32	21	32	32	42	42	48	47	49	54	40	29	29	32	46	52	56	....	38.6
Paterson	Maximum	56	50	58	65	68	55	57	57	50	53	52	44	39	39	47	48	66	70	70	76	57	62	69	59	46	36	47	54	59	63	....	55.7
	Minimum	41	32	24	45	42	44	39	34	34	30	35	30	29	29	18	34	30	44	37	48	45	48	50	36	28	27	33	47	53	56	....	37.4
Plainfield	Maximum	57	51	59	67	68	55	59	57	50	56	52	45	41	41	47	51	63	69	69	77	52	63	69	57	47	39	49	59	61	67	....	56.6
	Minimum	42	31	26	45	42	45	41	37	35	33	35	35	30	28	23	35	31	41	41	48	47	49	53	37	29	30	34	47	53	57	....	38.7
Ridgefield	Maximum	59	49	56	66	68	53	57	57	47	54	51	43	41	36	46	46	62	68	68	75	50	62	66	55	43	36	49	56	61	64	....	54.8
	Minimum	34	31	28	53	46	44	41	37	32	34	36	30	29	23	21	37	24	44	44	52	47	48	55	43	28	31	33	45	54	58	....	39.1
Somerville	Maximum	....	....	....	....	....	....	56	56	48	51	47	45	40	41	45	51	63	68	68	75	60	66	68	64	47	41	48	76	61	66	....	55.4[f]
	Minimum	....	....	....	....	....	....	40	34	32	31	34	31	28	38	17	31	27	38	38	45	47	50	49	40	29	28	33	46	53	56	....	37.0[f]
New York, N. Y.	Maximum	58	49	54	65	70	58	56	56	49	54	50	43	42	38	48	47	60	67	67	74	52	59	63	56	42	40	50	56	59	62	....	54.8
	Minimum	40	35	38	52	53	46	42	40	37	40	40	32	31	25	25	39	40	48	49	48	48	51	54	34	30	35	39	48	54	55	....	41.6
The Southern Interior.																																	
Belleplain	Maximum	64	....	50	68	71	59	64	56	50	56	50	44	45	46	45	53	64	71	70	76	60	66	71	60	48	46	60	65	64	66	....	58.9[a]
	Minimum	47	....	22	65	63	50	52	45	35	37	39	41	39	34	36	39	45	36	53	59	42	51	56	32	28	27	40	49	51	55	....	43.8[a]
Bridgeton	Maximum	61	53	67	69	68	56	63	51	52	55	50	44	46	41	45	53	65	70	72	74	60	69	69	49	49	50	60	65	65	64	....	58.5
	Minimum	31	27	44	46	44	43	38	33	30	35	34	29	33	21	30	30	33	37	40	45	49	53	44	30	30	38	50	52	56	57	....	38.7
Burlington	Maximum	62	52	60	70	70	63	63	63	48	50	54	48	43	49	46	53	64	69	68	74	62	70	71	66	48	45	51	67	62	68	....	59.3
	Minimum	45	34	25	47	50	47	43	38	36	39	31	29	32	39	41	33	32	37	38	43	49	50	52	40	30	33	34	43	53	58	....	40.0
Camden	Maximum	58	51	58	69	67	55	61	55	49	54	50	43	44	40	46	52	64	68	68	76	54	71	72	54	45	41	52	67	64	66	...	57.1
	Minimum	36	31	25	50	46	45	45	41	32	35	40	33	31	27	26	35	36	41	38	42	50	49	54	36	34	32	40	50	54	60	....	39.8
Freehold	Maximum	59	49	57	67	68	56	58	54	47	54	49	46	41	43	43	49	62	68	69	76	55	65	67	55	45	38	53	62	60	66	....	55.8
	Minimum	43	30	28	43	49	46	41	38	32	30	38	33	29	34	20	33	34	42	41	49	49	49	48	39	28	34	35	49	53	58	....	39.2
Hammonton	Maximum	62	52	63	68	70	54	64	55	50	57	52	43	44	42	44	52	65	72	74	79	55	68	71	48	47	50	59	64	63	69	....	58.5
	Minimum	32	29	45	50	48	41	37	35	32	36	35	27	31	21	28	33	38	40	46	49	49	52	45	31	31	38	50	52	59	60	....	40.0
Hightstown	Maximum	58	50	59	69	69	58	59	55	47	53	50	43	41	43	45	52	64	70	68	78	58	67	60	61	46	45	50	64	62	67	....	57.0
	Minimum	41	30	26	47	47	45	42	38	34	30	36	34	30	29	22	33	34	42	42	47	49	50	55	43	29	29	32	48	53	58	....	39.2
Indian Mills	Maximum	61	50	60	68	70	60	65	58	51	55	50	47	44	44	44	52	66	72	75	80	69	69	72	64	44	44	58	68	63	67	....	59.7
	Minimum	44	29	22	44	46	48	40	36	34	26	35	32	28	31	17	28	28	33	33	40	46	43	50	42	28	30	36	53	54	59	....	37.2
Lakewood	Maximum	61	49	54	67	66	52	59	55	47	56	49	44	44	43	43	48	62	67	70	71	56	62	67	61	44	43	54	61	61	66	....	56.1
	Minimum	45	30	24	38	45	45	44	40	32	29	39	34	30	32	22	32	32	42	36	44	47	49	52	41	29	34	41	52	54	58	....	39.1
Moorestown	Maximum	59	50	64	69	66	65	59	54	48	53	50	43	42	41	45	51	63	68	67	75	53	69	71	44	47	42	51	66	63	66	....	56.8
	Minimum	38	32	26	35	47	47	43	38	35	32	38	34	31	26	23	35	36	41	39	43	51	49	51	33	31	32	35	49	55	58	....	38.8
Pemberton	Maximum	59	52	60	69	69	61	61	54	50	57	52	45	43	45	45	53	64	70	72	79	61	69	72	62	50	43	56	67	63	68	....	59.0
	Minimum	46	32	28	46	47	47	42	38	34	30	38	38	30	33	22	32	30	37	38	43	51	49	54	45	31	31	37	51	55	59	....	39.8
Pleasantville§§	Maximum	66	60	62	65	69	55	63	54	50	57	51	45	44	44	46	52	66	71	65	70	56	63	66	61	47	51	59	61	63	62	....	58.1
	Minimum	41	29	21	36	45	43	41	36	28	24	37	30	25	34	18	26	29	32	35	38	42	50	55	46	27	30	42	49	49	56	....	36.5
Runyon	Maximum	68	64	64	68	69	54	52	54	56	54	52	47	46	44	46	58	66	69	70	79	69	71	67	63	56	38	49	54	60	66	....	59.1
	Minimum	34	23	19	38	36	38	35	34	30	23	34	24	23	20	10	23	26	30	34	41	44	45	41	27	23	30	29	41	48	47	....	31.7
Trenton	Maximum	58	49	57	68	66	54	60	53	47	52	49	42	44	40	45	52	64	69	66	75	53	67	69	54	47	38	50	65	62	66	....	56.6
	Minimum	38	34	31	49	48	45	42	39	36	35	37	32	31	27	25	36	35	42	42	49	49	52	54	36	31	32	37	48	55	59	....	40.2
Tuckerton	Maximum	58	60	38	62	58	70	62	70	60	58	54	42	45	45	42	58	60	58	66	70	61	66	64	58	52	55	59	61	60	64	....	58.9
	Minimum	46	40	50	41	49	49	54	56	49	38	37	34	32	33	24	38	46	42	50	56	47	54	50	48	30	40	50	55	50	52	....	44.7
Philadelphia, Pa.	Maximum	58	50	59	69	66	58	60	54	49	52	51	44	46	42	48	54	64	68	69	75	55	68	70	57	49	43	54	67	64	66	....	57.6
	Minimum	43	37	39	52	55	47	46	43	39	40	41	35	33	30	28	38	41	48	47	52	52	52	56	38	35	35	39	50	56	60	....	43.6
The Sea Coast.																																	
Asbury Park	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Atlantic City	Maximum	65	52	57	65	68	56	63	53	52	56	51	45	46	44	47	53	60	66	62	66	53	60	61	55	45	47	56	57	60	61	....	56.1
	Minimum	41	35	40	57	54	46	45	43	36	42	40	33	32	28	25	34	42	46	51	51	50	53	55	35	32	43	47	52	53	55	....	43.2
Long Branch	Maximum	60	48	56	66	64	53	58	54	47	56	49	44	41	38	41	46	62	70	72	72	51	58	64	55	43	45	51	56	59	64	....	54.8
	Minimum	34	30	27	54	49	43	42	38	31	31	39	29	29	27	22	33	34	45	46	49	49	51	55	37	34	37	45	49	53	56	....	39.9
Sandy Hook	Maximum	59	49	54	64	64	54	57	55	48	54	50	44	45	42	44	47	58	65	64	69	51	58	61	53	44	42	50	55	57	61	....	53.9
	Minimum	42	37	39	54	52	47	45	44	39	41	42	36	34	29	28	40	41	47	46	49	48	51	53	38	34	36	42	50	53	54	....	43.0

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook**	Evaporation	.008	.048	.020	.012	.038	.040	.072	.048	.056	.034	.056	.032	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	31	36	23	45	35	12	59	65	38	14	20	27	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pleasantville**	Evaporation	.064	.080	.010	*	.102	.064	.128	.032	.048	.010	.128	.048	.004	*	*	*	.192	*	.096	.010	.016	.080	.064	*	.160	.010	.048	*	†	.026	....	2.550
	Wind movement	62	59	26	87	81	34	93	61	34	39	53	69	79	81	114	50	11	64	4	31	54	74	109	94	126	79	100	60	97	97	....	2022
Runyon	Evaporation	.030	.060	.060	.040	.060	.020	.060	.060	.060	.060	.000	.060	.040	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	50	26	25	61	14	42	40	54	18	31	31	51	45	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day. *** Pan overflowed. † 1.130

51.05
NNJ

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CLIMATOLOGICAL DATA

24

NEW JERSEY SECTION.

H. O. GEREN.
TRENTON, N. J.

VOL. XXXIX. DECEMBER, 1934. No. 12.

NOTE.—The price of this publication is 50 cents per year (not in stamps), payable to the Superintendent of Documents, Government Printing Office, Washington, D. C. It is furnished without charge to the cooperative observers whose work appears herein.

GENERAL SUMMARY.

While a majority of the days during the month had an average temperature above the daily normals, the State average showed a slightly below normal condition. This was due mainly to the effect of a decidedly cold period from the 7th to 12th, inclusive. The maximum temperatures registered on the 1st proved to be the highest for the month and were in the sixties. The lowest were generally between zero and 12 to 14 degrees above and were recorded in the period from the 9th to 12th, inclusive. Two stations, Indian Mills and Runyon, reported temperatures of one and three degrees below zero, respectively.

The rainfall for the month was below the normal and was quite evenly distributed over the State. In percentages of normal all sections had practically the same, except the Seacoast districts which had 67% as compared with 78% for the remainder of the State. General rains came on the 1st, 4th, 19-20th, 22d, 26th and 29th. Other more or less inconsequential amounts were recorded on other dates. The State average snowfall was the second least on record for the month of December, the least being that of 1927 when only a trace was recorded while this month the average was 0.1 inch. Measurable amounts occurred at only a few stations and in these cases were all less than an inch.

TEMPERATURE.

The monthly mean temperature of the State, as computed from observations of 37 stations, was 33.2°, which was 0.5° below normal. The highest temperature was 69° at Burlington and Charlotteburg on the 1st, and the lowest, —3°, at Runyon on the 12th. The greatest daily range of temperature was 41° at Runyon on the 19th. The highest monthly mean temperature was 37.5° at Tuckerton, and the least, 28.8° at Layton.

The temperature departure from the normal for the year, 1934, to date, by sections, is: The Highlands, +0.6°; Red Sandstone Plain, —0.2°; Southern Interior, —0.1°; Sea Coast, —0.1°.

PRECIPITATION.

The mean total precipitation of the State, as computed from observations of 44 stations, was 2.90 inches, which was 0.75 inch below normal. The average total snowfall at 20 selected stations was 0.1 inch, which was 5.6 inches below normal. The greatest monthly precipitation was 4.11 inches, at Little Falls, and the least, 1.89 inches at Layton. The greatest amount of precipitation in any 24 consecutive hours was 2.38 inches at Port Norris on the 19th. The mean of the number of days on which 0.01 inch or more of precipitation fell was 8, or 1 less than normal.

The precipitation accumulated departure from the normal for the year 1934, to date, by sections, is: The Highlands, +2.20 inches; Red Sandstone Plain, +2.06 inches; Southern Interior, —0.40 inch; Sea Coast, —4.15 inches.

WIND.

The prevailing wind direction was from the northwest. The wind movement averaged 14 miles per hour, which was normal. The highest velocity, sustained for 5 consecutive minutes, was 53 miles per hour from the southeast at Atlantic City on the 19th.

MISCELLANEOUS.

The per cent of possible sunshine was 54, or 2 per cent above normal.

The mean atmospheric pressure, reduced to sea level, was 30.06 inches, or 0.04 inch below normal. The highest reading 30.52 inches at Trenton and Atlantic City on the 27th and 3d respectively, and the lowest 29.16 inches at Long Branch, Ridgefield and Sandy Hook on the 19th.

The mean stage of the Delaware River at Phillipsburg was 5.2 feet, and the highest 15.9 feet on the 2d. At Trenton the mean stage was 3.2 feet, and the highest 8.6 feet on the 3d.

Sleet was observed at scattered points in the State on the following dates: 16, 19, 25 and 29. Dense fog occurred in the interior sections of the State on the 29th, and was also noted at a few scattered places on the 4th, 19th and 26th. A thunderstorm was noted at Atlantic City on the 19th.

ERRATA.

April 1934. Freehold, mean minimum temperature should be 38.6°; mean temperature should be 49.5°. August 1934. Sandy Hook, monthly mean pressure should be 30.03. October 1934. Freehold, mean temperature, should be 52.9°. November 1934. Belleplain, number of clear days 14, partly cloudy, 5.

COMPARATIVE DATA FOR DECEMBER

Year	Temperature				Precipitation					No. of days			
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest monthly	Least monthly	Aveeage snowfall	.01 inch or more prec.	Clear	Partly cloudy	Cloudy
1885	35.3	+1.6	60	6	3.15	−0.50	4.33	2.47	......	....	....	....	....
1886	29.1	−4.6	60	−2	3.51	−0.14	4.65	1.62	......	....	....	....	....
1887	33.7	0.0	62	6	5.29	+1.64	7.32	3.64	......	10	....	....	....
1888	34.9	+1.2	65	5	3.69	+0.04	4.95	2.05	......	8	....	....	....
1889	**41.5**	+7.8	71	8	1.62	−2.03	3.69	**0.25**	......	9	....	....	....
1890	30.9	−2.8	56	3	3.89	+0.24	5.74	2.34	......	8	11	10	10
1891	40.9	+7.2	71	9	4.25	+0.60	5.32	2.25	......	8	13	9	9
1892	30.4	−3.3	68	1	1.87	−1.78	3.09	1.30	......	6	9	11	11
1893	34.9	+1.2	70	5	3.39	−0.26	4.66	1.67	......	11	11	10	10
1894	34.8	+1.1	66	−3	4.36	+0.71	6.39	1.64	......	9	12	9	10
1895	37.2	+3.5	70	3	2.61	−1.04	5.42	1.71	0.4	6	11	9	11
1896	31.3	−2.4	64	−15	**1.48**	−2.17	2.70	0.85	10.7	4	14	9	8
1897	35.1	+1.4	69	−3	4.90	+1.25	6.44	3.07	3.4	11	8	11	12
1898	33.3	−0.4	66	−2	3.53	−0.12	4.85	2.38	2.0	9	12	10	9
1899	35.5	+1.8	69	−1	2.11	−1.54	4.30	1.29	0.5	7	14	10	7
1900	34.4	+0.7	64	−2	2.59	−1.06	3.97	1.47	4.1	6	14	10	7
1901	32.6	−1.1	68	−8	**7.30**	+3.65	**9.45**	4.87	2.1	11	12	9	10
1902	31.7	−2.0	62	−11	7.23	+3.58	8.99	5.81	9.1	13	13	7	11
1903	28.6	−5.1	56	−13	4.08	+0.43	5.49	3.20	9.2	9	14	9	8
1904	27.0	−6.7	60	−15	3.19	−0.46	5.38	2.06	**21.1**	12	10	7	14
1905	36.3	+2.6	61	5	3.65	0.00	5.60	2.58	1.5	7	14	8	9
1906	33.0	−0.7	70	−5	3.99	+0.34	6.18	2.70	1.4	13	9	8	14
1907	36.6	+2.9	70	−3	4.91	+1.26	7.13	3.55	5.9	9	12	8	11
1908	34.0	+0.3	**72**	1	3.63	−0.02	5.26	2.10	7.8	11	10	8	13
1909	29.8	−3.9	60	−15	4.45	+0.80	5.51	3.55	12.6	5	14	8	9
1910	26.5	−7.2	58	−14	2.79	−0.86	4.60	1.92	11.3	9	11	10	10
1911	38.4	+4.7	70	2	3.77	+0.12	5.09	2.94	5.6	11	10	7	14
1912	36.9	+3.2	68	−1	4.73	+1.08	6.33	3.40	11.0	9	12	9	10
1913	37.7	+4.0	63	−11	3.03	−0.62	4.59	1.47	0.8	7	13	0	9
1914	31.1	−2.6	66	−9	5.86	+2.21	9.12	2.99	2.4	12	10	6	15
1915	31.9	−1.8	64	3	4.82	+1.17	7.83	2.19	13.6	8	12	9	10
1916	32.3	−1.4	70	−8	4.61	+0.96	6.34	3.35	12.6	11	13	8	10
1917	**24.8**	−8.9	54	**−21**	3.18	−0.47	5.46	1.55	11.5	8	13	7	11
1918	37.5	+3.8	66	9	3.92	+0.27	4.94	3.21	0.5	10	12	7	12
1919	28.8	−4.9	67	−18	2.98	−0.67	5.14	1.84	6.8	12	10	8	13
1920	36.4	+2.7	69	7	5.10	+1.45	6.63	2.86	1.0	8	11	8	12
1921	32.3	−1.4	64	−4	2.37	−1.28	3.23	1.62	6.2	9	13	8	10
1922	32.5	−1.2	65	−8	3.86	+0.21	5.26	3.09	7.3	12	9	9	13
1923	40.8	+7.1	69	9	4.14	+0.49	5.14	2.44	2.6	12	13	7	11
1924	32.8	−0.9	68	−4	2.58	−1.07	3.42	1.85	0.4	8	10	8	13
1925	34.0	+0.3	61	−5	2.84	−0.81	4.58	1.08	0.6	10	13	7	11
1926	28.4	−5.3	52	−7	3.44	−0.21	4.74	1.67	8.2	11	11	7	13
1927	35.3	+1.6	70	2	4.54	+0.89	5.76	2.80	T.	12	13	6	12
1928	36.3	+2.6	63	3	1.64	−2.01	4.63	0.69	2.7	8	15	5	11
1929	33.8	+0.1	68	2	3.01	−0.64	4.34	1.00	4.1	10	11	6	14
1930	33.0	−0.7	60	−5	2.67	−0.98	3.92	1.58	5.2	8	10	7	14
1931	39.6	+5.9	72	7	2.27	−1.58	3.24	1.57	0.4	9	13	5	13
1932	36.0	+2.3	69	−6	3.08	−0.57	4.72	1.52	10.1	13	12	6	13
1933	31.8	−1.9	**72**	−18	3.19	−0.46	5.77	2.12	7.4	12	12	5	14
1934	33.2	−0.5	69	−3	2.90	−0.75	4.11	1.89	0.1	8	14	7	10
Period	33.7	....	72	−21	3.65	....	9.45	0.25	5.7	9	12	9	10

W. B. O. Philadelphia-1-29-35-1050

Climatological Data for December, 1934

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr							Precipitation in inches				No. of days				Prevailing direction of wind	Observers
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	Precipitation, .01 in. or more	Clear	Pt. cloudy	Cloudy		
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	31.0	+0.2	65	1	10	9	33	2.99	−0.92	1.05	T.	7	12	9	10	.....	Miss C. S. Hixson.
Charlotteburg‡‡	Passaic	719	42	32.1	+0.2	69	1	5	31	32	3.36	−0.64	1.55	T.	8	17	0	14	w.	Newark Water Dept.
Culvers Lake‡‡	Sussex	848	33	.....	.....	.....	.....	5	9	....	2.57	−0.77	1.13	0.9	7	12	11	8	w.	Brice E. Riker.
Dover	Morris	600	50	30.2	+0.1	63	1	7	11†	31	3.24	−0.94	1.35	T.	6	9	11	11	.....	William C. Harris
Layton	Sussex	480	33	28.8	+0.7	65	1	3	9†	37	1.89	−1.48	1.10	T.	5	6	4	21	nw.	A. M. Depue.
Long Valley	Morris	520	4	30.7	.....	64	1	6	12	34	2.11	.....	1.10	T.	7	15	1	15	nw.	S. N .Dilts.
Newton	Sussex	769	51	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Irving J. Kern.
Phillipsburg	Warren	363	§51	31.8	+0.3	65	1	12	9	30	2.47	−0.96	0.92	0.5	8	11	8	12	.....	Town Engineer.
Sussex	Sussex	442	39	30.4	+0.5	63	1	6	9	31	3.28	+0.31	1.92	T.	6	15	5	11	.....	A. J. W. Mowatt
Means and extremes	.....	.....	....	30.7	+0.6	69	1	3	9†	37	2.74	−0.77	1.92	0.2	7	12	6	13	nw.	
The Red Sandstone Plain.																				
Boonton	Morris	400	§44	29.2	−0.1	64	2	9	10†	27	3.18	−0.52	1.30	.....	8	15	2	14	nw.	John Kline.
Canoe Brook	Essex	173	4	31.0	.....	66	1†	6	12†	37	3.55	.....	1.18	.....	9	13	9	5	nw.	N. J. Water Policy Comm.
Chatham	Morris	185	30	.....	.....	.....	.....	.....	.....	....	4.02	−0.15	1.38	.....	12	11	8	12	.....	Paul Molitor. Sr.
Elizabeth	Union	45	55	33.8	+0.2	68	1	10	12	27	2.69	−1.23	1.13	T.	7	16	8	7	nw.	Union County Park Comm.
Flemington	Hunterdon	140	§48	33.4	+0.9	66	1	8	12	32	2.58	−1.08	0.93	T.	8	19	5	7	w.	Hiram E. Deats.
Jersey City	Hudson	10	36	33.5	−1.0	65	1	10	12	23	2.48	−1.17	1.14	T	7	11	7	13	nw.	S. K. Pearson.
Lambertville	Hunterdon	430	47	31 2	−2.3	64	1	7	12	29	2.60	−1.10	1.13	0.1	8	17	5	9	nw.	Wm. J. Lauderdale.
Little Falls	Passaic	180	§31	32.1	−0.3	66	1	8	12	33	4.11	+0.17	1.83	T.	10	16	9	6	nw.	Passaic Valley Water Co
New Brunswick	Middlesex	110	81	32.8	−0.6	67	1	9	12	31	2.17	−1.37	0.98	T.	7	16	5	10	w.	N. J. Experiment Station
New Milford‡‡	Bergen	40	16	.....	.....	.....	.....	.....	.....	....	3.01	+0.01	1.22	.....	8	....	....	....	.....	Hackensack Water Co
Paterson	Passaic	80	64	32.3	−1.1	65	1	8	12	28	2.61	−1.24	1.30	T.	6	15	4	12	nw.	William H. Meyer.
Plainfield	Union	120	46	32.7	−0.1	67	1	10	12	29	2.35	−1.52	1.18	0.4	7	13	7	11	nw.	S. K .Pearson.
Ridgefield	Bergen	80	17	31.6	+0.3	65	1	10	9	29	2.72	−1.09	1.30	T.	6	12	7	12	nw.	George P. Kirsten.
Somerville	Somerset	70	51	32.4	−0.1	67	1	9	12	32	2.39	−1.32	1.04	T.	8	12	9	10	nw.	Louis L. Miller.
Woodcliff Lake‡‡	Bergen	100	16	.....	.....	.....	.....	.....	.....	....	3.11	+0.12	1.00	.....	8	....	....	....	.....	Hackensack Water Co.
New York, N. Y.	.....	314	64	33.4	−0.6	64	1	10	11	25	2.43	−1.19	1.11	T.	8	11	7	13	nw.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	32.2	−0.4	68	1	6	12†	37	2.90	−0.82	1.83	T	8	14	7	10	nw.	
The Southern Interior.																				
Belleplain	Cape May	30	40	36.2	+1.1	62	1	7	9	39	2.46	−1.54	1.46	T.	2	14	7	10	w.	Mrs. Edward C. Hoffman.
Bridgeton	Cumberland	30	51	33.7	−2.4	65	1	13	8†	32	2.77	−0.93	0.64	T.	8	22	0	9	sw.	Bennett K. Matlack
Burlington	Burlington	12	§48	36.2	+1.3	69	1	14	9†	29	3.06	−0.89	0.72	T.	7	16	5	10	nw.	Public Service G. & E. Co.
Camden	Camden	20	2	34.0	.....	65	1	14	11†	33	2.23	.....	1.00	0.4	9	7	11	13	nw.	Central Airport, Inc.
Freehold	Monmouth	194	¶30	33.2	.....	66	1	7	12	33	3.03	−0.69	1.12	0	9	21	0	10	w.	Moreau Plant Co.
Hammonton	Atlantic	110	§28	33.8	.....	67	1	12	11	33	3.57	−0.41	1.06	T.	9	18	10	3	nw.	Geo. W. Lobley.
Hightstown	Mercer	110	41	33.6	+0.7	62	1	8	12	32	2.84	−0.70	1.04	T.	8	17	3	11	w.	Braun Bros.
Indian Mills‡‡	Burlington	76	45	35.2	+1.2	66	1	−1	12	35	3.27	−0.84	1.18	0	7	7	14	10	nw.	James M. Armstrong.
Lakewood	Ocean	54	30	34.1	+0.2	65	1	7	12	35	3.19	−1.00	1.26	T.	7	12	6	13	nw.	R. W. Holman.
Moorestown	Burlington	62	71	33.6	−0.1	67	1	10	11	34	3.31	−0.46	1.02	T.	8	15	5	11	nw.	Japanese Beetle Laboratory
Northfield‡‡	Atlantic	25	27	.....	.....	.....	.....	.....	.....	....	3.00	−0.77	1.30	0	6	....	....	....	.....	William L. Flick.
Pemberton	Burlington	55	4	34.8	.....	66	1	8	12	34	3.24	.....	1.00	T.	7	17	6	8	w.	Charles S. Beckwith.
Pleasantville‡‡	Atlantic	11	§36	34.6	.....	63	1	3	12	40	3.15	−0.78	1.34	.....	9	22	5	4	nw.	N. J. Water Policy Comm.
Port Norris	Cumberland	10	2	.....	.....	.....	.....	.....	.....	....	3.42	.....	2.38	0	4	17	12	2	nw.	S. T. Garrison.
Runyon‡‡	Middlesex	18	11	31.1	.....	67	1	−3	12	41	2.64	−0.70	1.08	.....	7	16	10	4	w.	N. J. Water Policy Comm.
Trenton	Mercer	190	62	33.3	−1.1	67	1	11	11	29	2.37	−0.98	1.07	0.7	10	8	9	14	nw.	U. S. Weather Bureau.
Trenton No. 2	Mercer	105	9	.....	.....	.....	.....	.....	.....	....	3.38	.....	1.26	T.	9	....	....	....	.....	Edward H. Ristow.
Tuckerton	Ocean	23	41	37.5	+2.3	60	1	10	12	29	3.26	−1.07	1.11	0	7	16	9	6	nw.	John H. Brown.
Philadelphia, Pa.	.....	114	63	35.9	−0.4	67	1	16	11	25	2.61	−0.82	1.02	0.7	9	8	10	13	n.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	34.3	+0.4	69	1	−3	12	41	3.01	−0.84	2.38	0.1	7	15	7	9	nw.	
The Sea Coast.																				
Asbury Park	Monmouth	22	45	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	....	....	....	.....	S. W. Triano.
Atlantic City	Atlantic	52	61	36.4	0.0	60	1	12	12	23	2.79	−1.15	1.06	T.	9	7	8	16	w.	U. S. Weather Bureau.
Long Branch	Monmouth	25	26	32.0	−2.2	66	1	11	9†	29	2.98	−1.17	1.27	T	9	7	12	12	nw.	William D. Martin.
Sandy Hook	Monmouth	22	36	33.8	−1.4	63	1	14	11	23	2.30	−1.74	1.17	T.	8	9	7	15	nw.	U. S. Weather Bureau.
Means and extremes	.....	.....	....	34.1	−1.2	66	1	11	9†	29	2.69	−1.35	1.27	T.	9	8	9	14	nw.	
For the State	.....	.....	....	33.2	−0.5	69	1	−3	12	41	2.90	−0.75	2.38	0.1	8	14	7	10	nw.	

† On other dates also. § Length of precipitation record; temperature record is much shorter. § Incomplete. ¶ Length of precipitation only.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. †† Received too late to be included in the means.

Reference letters, a, b c, etc., appearing in the table indicate number of days missing; for example, b represents 2 days, etc. T, precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address as follows:—Culvers Lake is Branchville; Indian Mills is R. D. 2, Vincentown; New Milford and Woodcliff Lake are Uniontown; Northfield is Pleasantville: Pleasantville, Canoe Brook and Runyon are Trenton; Charlotteburg is Newfoundland.

Daily Precipitation for December, 1934

Stations	Drainage Basin	Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
The Highlands and Kittatinny Valley																																	
Belvidere	Delaware	1.05			.16									T.			T.				.95		.10			.03	.52			.18			2.99
Charlotteburg	Passaic	.80			.05												.06			1.55		.22	.06				.46			.16			3.36
Culvers Lake	Delaware	1.13												T.			.01	T.		.83			.01			.05	.44			.10			2.57
Dover	Passaic	.87			.22									T						1.35			.12				.52			.16			3.24
Layton	Delaware	1.10			.10															.57	T.		T.			T.	.08			.04			1.89
Long Valley	Morris	.10	.05		.21			T.												1.10			.06				.47			.12			2.11
Newton	Delaware																																
Phillipsburg	...do	.55		.03	.15		T.		T.				T.	T.			T.			.92	.04		T.			.08	.57			.13		T.	2.47
Sussex	Hudson	1.92												T.			.12			.59			.02				.57			.06			3.28
The Red Sandstone Plain.																																	
Boonton ‖	Passaic	1.04	.08		.23															.01	1.30			.01			T.	.38		.13			3.18
Canoe Brook ‖	Essex	1.00	.26		.28			T.						T.	T.		T.	.02		.14	1.18			T.		T.	.41	.08		.18			3.55
Chatham ‖	...do	1.17	.22		.28			.02						.02				.05		.04	1.38			.11			.07	.45		.21			4.02
Elizabeth	Coast	.13			.40			T.						T.	T.					1.13	.10		.05			T.	.56			.32			2.69
Flemington	Raritan	.34		T.	.43			T.		T.			T.				.01	T.		.93	.09		.08			T.	.46			.24			2.58
Jersey City	Coast	.06		T.	.43		T.	T.						T.	T.		.07	T.		1.14	T.		.02		T.	T.	.51		T.	.25			2.48
Lambertville	Delaware	.31			.41			.01	T.	T.						T.			1.13	.06			.05			T.	.36			.27			2.60
Little Falls ‖	Passaic	1.00	.24		.29															.03	1.80	T.	.01	T.		.01	.18	.35		.20			4.11
New Brunswick	Raritan	.09			.22			T.									T.			.98	.02		.03			T.	.53			.30			2.17
New Milford ‖	Hackensack	.54	.20		.35													.04			1.22			.03				.42		.21			3.01
Paterson	Passaic	.35			.32												T.			1.30	T.		.02			T.	.43			.19			2.61
Plainfield	Raritan	.10			.38			.04						T			.02			1.18						T.	.42			.21			2.35
Ridgefield**	Hackensack	T.		.08	.41			T.						T.	T.		T.			1.30			.05			T.	.53			.35		T.	2.72
Somerville	Raritan	.19			.36			T.									.01			1.04	.12		.06			T	.40			.21			2.39
Woodcliff Lake ‖	Hackensack	.72	.33		.36													.03			1.00			.04				.44		.19			3.11
New York, N. Y***	Coast	.04		.10	.34		T.	T.						T.	T.		.07	T.		1.11	T.		.02		T.	T.	.50		T.	.25		T.	2.43
The Southern Interior.																																	
Belleplain	Tuckahoe	T.			T.					T	T.						T.			1.46	T.		T.				1.00						2.46
Bridgeton	Delaware	.09		.28					T.								.05		.15	.64							.46		.62			.48	2.77
Burlington	Delaware	.22		.35													.45			.72			.30			.40			.62				3.06
Camden**	...do	.12		.05	.03					T.				T.			T			1.00			.02				.33		.40	.23		.05	2.23
Freehold	Raritan	.21	.02		.46												.05			1.12	.05		.02				.50			.60			3.03
Hammonton	Mullica	.26		.32						T									.09	1.06			.02			.10	.42		.59			.71	3.57
Hightstown	Raritan	.30		T.	.38				T.	T.							.05			1.04	.01		.03			T.	.47			.56			2.84
Indian Mills	Mullica	.15			.49												.08	T.		1.18			.09				.54			.74			3.27
Lakewood	Metedeconk	.32	.03		.30					T.										1.26	.05		T.			T.	.55			.68			3.19
Moorestown ‖	Delaware	.61	.21		.40					T										.04	1.02						.05	.30		.68			3.31
Northfield	Coast	.33			.15												T.			1.30	.02		T.				.70			.50			3.00
Pemberton	Delaware	.23	T.	T.	.33				T.	T.							T			1.00	.65	T.	.01				.35			.67			3.24
Pleasantville ‖	Coast	.09	.38		.21						T.									.04	1.30			.02			.03	.60		.48			3.15
Port Norris	Maurice	.12			T.															2.38							.52			.40			3.42
Runyon	Coast	.15	.08		.44															1.08	.05						.52			.32			2.64
Trenton***	Delaware	.11		.13	.20		T.	T.	T.	T					T.		.02	T.		1.07			.01			T	.39		.03	.36		.05	2.37
Trenton No. 2 ‖	...do	.67	.18		.33			T.		T.	T.							.02		.02	1.24			T.		T.	.09	.42		.41			3.38
Tuckerton	Coast	.40			.14												.02			1.11							.69			.48		.42	3.26
Phila., Pa***	Delaware	.09		.17	.23			T.	T.	T.				T.			T.			1.02			.05			T.	.36		.15	.47		.07	2.61
The Sea Coast.																																	
Asbury Park	Coast																																
Atlantic City***	...do	.37		.08	.11					T	T.						T			1.06			.01			T.	.65		.26	.23		.02	2.79
Long Branch**	...do	.23		.12	.26									T.			.04			1.27			.01			T.	.50		.05	.50		T.	2.98
Sandy Hook***	...do	.08		.11	.30		T.	T.	T.					T.			.01			1.17			.03			T.	.30		T.	.30		T.	2.30

Except as otherwise indicated, observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for 24-hour period, midnight to midnight. ‡ Separate dates of falls not recorded. ‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. § Incomplete or missing. * Precipitation included in the next following measurement. **Precipitation for 24-hour period from midnight to midnight. T. Trace, or less than 0.01 inch.

PRESSURE, WIND, HUMIDITY AND SUNSHINE

Stations.	Atmospheric pressure (reduced to sea level)					Wind				Relative humidity			Percentage of sunshine
	Monthly mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	12 noon	8 p. m.	
Atlantic City	30.11	30.52	3	29.27	19	16.0	53	se.	19	72	58	64	54
Long Branch	30.08	30.49	31	29.16	19					68	59	56	56
New York, N. Y	30.07	30.50	31	29.16	19	17.0	58	nw.	26	66	57	55	54
Philadelphia, Pa	30.10	30.52	3	29.24	19	12.6	43	s.	1	64	56	53	57
Ridgefield	30.07	30.51	31	29.16	19								
Sandy Hook	30.07	30.49	3	29.16	19	15.9	43	nw.	26	74	66	65	52
Trenton	30.09	30.52	27	29.20	19	10.1	32	nw.	26	73	59	65	53

Daily Temperatures for December, 1934

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
The Highlands and Kittatinny Valley.																																	
Belvidere	Maximum	65	49	49	50	42	40	37	25	25	24	24	30	40	40	37	41	42	39	41	52	40	38	31	38	32	42	32	40	41	36	33	38.5
	Minimum	48	35	28	38	35	28	22	15	10	11	13	12	25	20	19	29	35	18	16	19	26	27	25	25	27	29	17	18	25	19	11	23.4
Charlotteburg	Maximum	69	55	56	50	43	41	39	33	30	22	25	29	38	40	42	44	47	48	44	52	48	41	37	36	40	42	44	38	42	46	37	41.9
	Minimum	53	35	42	37	33	28	19	10	6	8	6	6	20	19	16	23	32	29	29	34	24	20	20	26	28	26	13	9	21	15	5	22.3
Dover	Maximum	63	53	43	49	42	39	32	24	24	23	20	29	29	39	35	44	41	43	52	45	41	37	33	37	32	41	32	41	44	32	35	37.9
	Minimum	40	34	29	34	33	27	19	10	8	10	7	7	25	30	19	28	27	21	21	31	26	24	24	29	27	29	14	14	28	16	10	22.6
Layton	Maximum	65	48	42	51	40	41	33	21	23	24	20	31	39	41	34	44	42	41	50	52	42	35	37	37	28	44	34	39	42	35	35	38.4
	Minimum	45	30	25	36	35	27	15	8	3	3	6	5	22	18	15	17	28	17	13	33	26	22	18	16	25	27	13	8	24	15	3	19.3
Long Valley	Maximum	64	51	42	49	40	40	35	26	21	23	22	27	27	38	36	43	42	38	52	52	40	37	35	36	36	40	38	42	46	41	33	38.5
	Minimum	52	34	26	35	34	38	19	11	8	10	9	6	21	20	18	26	34	21	18	34	25	32	26	20	26	28	14	14	28	12	10	22.9
Newton	Maximum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Phillipsburg	Maximum	65	48	43	50	44	42	32	24	25	24	24	31	41	40	37	43	43	36	51	42	41	38	34	38	34	41	29	40	47	36	31	38.5
	Minimum	44	35	30	36	32	29	21	16	12	14	14	14	28	23	22	31	31	23	21	35	29	28	26	24	29	27	18	19	31	19	14	25.0
Sussex	Maximum	63	54	48	51	42	40	35	27	25	23	21	31	37	41	37	43	43	42	50	52	41	36	35	35	32	42	40	36	41	39	31	39.1
	Minimum	51	29	29	28	35	27	19	12	6	9	8	9	24	20	18	24	28	18	19	31	27	22	19	19	25	28	19	12	25	22	7	21.6
The Red Sandstone Plain.																																	
Boonton§§	Maximum	62	64	43	49	43	39	32	23	18	11	17	29	39	32	34	38	34	39	40	46	41	34	29	29	31	43	32	33	38	33	38	35.9
	Minimum	55	39	30	30	37	30	22	12	10	9	10	9	17	23	19	21	33	22	21	31	25	24	22	22	23	28	16	13	15	19	11	22.5
Canoe Brook§§	Maximum	66	66	47	53	46	44	35	27	26	24	24	32	41	41	38	44	41	44	53	43	42	38	35	40	35	43	33	43	45	34	42	40.8
	Minimum	59	34	23	38	34	27	21	9	8	7	9	6	22	20	14	23	34	13	16	31	23	20	19	21	26	24	15	11	25	19	6	21.2
Elizabeth	Maximum	68	55	50	44	44	47	46	28	21	27	30	31	42	42	43	42	40	37	50	60	39	42	43	37	40	44	40	34	46	48	34	41.7
	Minimum	55	36	29	40	34	28	24	11	11	12	13	10	25	32	20	28	35	22	25	38	27	36	25	26	31	31	18	18	31	21	11	25.9
Flemington	Maximum	66	54	45	53	47	47	41	30	28	25	23	33	47	44	45	45	45	46	52	52	42	41	37	40	35	45	38	47	49	43	37	42.6
	Minimum	50	36	27	38	33	26	23	14	10	12	14	8	25	23	20	28	35	19	20	35	27	25	24	25	29	28	17	18	30	21	13	24.3
Jersey City	Maximum	65	50	47	52	65	43	33	26	26	26	23	33	40	42	38	44	42	42	52	46	45	43	38	39	38	49	30	45	46	32	34	40.5
	Minimum	46	39	35	37	35	30	24	15	11	13	11	10	27	24	21	33	32	25	32	36	31	30	24	30	31	30	18	22	32	21	15	26.5
Lambertville	Maximum	64	51	46	49	43	44	32	26	22	22	23	30	42	38	45	43	42	52	49	46	44	40	36	38	36	40	27	45	46	34	34	39.6
	Minimum	41	39	28	36	29	27	21	12	9	9	12	7	23	19	28	22	18	23	30	24	29	27	22	29	28	27	17	20	22	20	11	22.9
Little Falls§§	Maximum	66	65	42	53	47	43	35	28	28	25	23	32	40	42	38	45	41	46	54	43	45	39	32	40	33	45	33	39	44	33	42	40.8
	Minimum	58	38	29	37	35	30	22	14	9	10	10	8	21	22	18	24	34	22	21	33	28	24	22	22	28	28	16	13	20	19	10	23.4
New Brunswick	Maximum	67	54	45	51	44	43	39	27	23	23	22	30	41	41	37	44	44	40	53	54	45	38	37	40	37	49	40	42	47	42	33	41.0
	Minimum	53	37	29	38	34	26	23	16	11	12	13	9	23	18	21	30	36	20	22	36	27	24	23	28	29	28	18	12	31	21	12	24.7
Paterson	Maximum	65	52	44	53	44	43	37	24	26	25	22	33	41	42	37	45	45	42	52	53	44	39	32	38	33	45	39	37	43	40	36	40.4
	Minimum	51	34	30	40	37	30	22	13	9	10	11	8	26	22	19	25	32	22	24	33	28	27	22	25	29	29	17	15	29	20	10	24.2
Plainfield	Maximum	67	50	45	53	45	43	32	26	25	24	24	32	42	42	38	44	42	42	53	50	43	43	34	38	36	45	30	45	48	34	33	40.3
	Minimum	48	37	30	38	36	26	24	16	11	12	11	10	26	22	21	29	32	22	24	36	26	27	25	27	30	30	18	17	31	21	14	25.1
Ridgefield	Maximum	65	49	47	51	43	43	29	22	25	25	20	31	40	40	35	42	40	36	54	41	42	38	34	39	37	47	27	38	43	35	32	38.4
	Minimum	42	36	30	36	31	28	23	15	10	13	12	10	27	21	19	31	28	21	25	32	30	28	22	30	30	30	17	19	31	26	13	24.7
Somerville	Maximum	67	53	46	52	43	43	36	27	25	24	23	31	43	41	38	45	44	40	52	53	43	38	38	40	36	44	40	42	48	40	33	40.9
	Minimum	52	36	26	36	34	26	22	14	11	10	12	9	24	21	20	29	36	18	20	36	26	24	22	23	28	28	18	16	32	21	10	23.9
New York, N. Y.	Maximum	64	49	47	51	45	44	34	25	27	28	22	33	40	42	38	44	42	42	52	44	47	43	41	40	39	50	30	45	44	32	34	40.6
	Minimum	44	39	35	36	34	30	23	14	11	14	10	10	28	24	21	34	30	26	33	36	32	30	23	31	31	25	17	24	32	18	15	26.1
The Southern Interior.																																	
Belleplain	Maximum	62	56	58	58	48	49	40	31	30	27	27	32	44	42	41	48	50	45	55	55	51	43	44	48	55	52	47	50	55	50	35	46.1
	Minimum	54	33	36	36	36	32	31	16	7	19	11	12	28	24	18	28	27	17	16	36	30	21	28	33	29	35	28	24	39	24	8	26.3
Bridgeton	Maximum	65	50	48	54	46	48	34	30	27	25	20	34	42	49	42	47	44	42	54	40	49	42	40	46	48	51	38	49	54	34	47	42.9
	Minimum	34	30	39	32	26	26	17	13	14	14	13	15	22	20	29	36	23	23	36	25	26	25	29	29	28	19	20	34	27	16	20	24.5
Burlington	Maximum	69	55	51	53	52	47	43	32	26	24	28	31	45	43	42	43	45	42	56	59	48	43	38	42	42	51	49	46	51	54	33	44.6
	Minimum	57	38	33	41	35	27	25	18	14	14	16	14	23	24	23	29	37	23	33	38	27	27	26	31	31	30	21	21	33	25	25	27.7
Camden	Maximum	65	51	47	54	49	49	33	27	20	23	23	30	42	42	40	44	45	41	55	44	49	40	40	44	42	50	31	47	54	36	34	41.6
	Minimum	45	38	34	38	33	29	23	17	16	15	14	14	25	26	25	31	31	26	22	32	28	27	27	32	29	26	21	21	35	21	18	26.4
Freehold	Maximum	66	53	56	53	45	43	38	26	21	24	23	30	41	40	36	43	43	39	54	54	46	39	38	41	52	43	40	46	43	38	33	41.5
	Minimum	53	36	28	38	28	25	23	15	10	12	14	7	23	19	20	28	35	21	21	36	27	26	24	82	28	37	18	17	36	22	12	24.9
Hammonton	Maximum	67	50	48	55	42	49	34	29	25	27	25	31	42	41	43	46	44	43	52	44	49	45	44	45	50	52	32	49	53	33	48	43.1
	Minimum	34	32	34	34	26	26	17	14	13	14	12	15	22	21	24	38	23	25	38	26	28	25	30	30	36	20	21	24	27	15	18	24.6
Hightstown	Maximum	62	51	47	52	45	45	36	27	24	24	24	31	41	41	39	42	43	43	54	54	46	45	38	41	40	51	41	46	48	41	33	41.7
	Minimum	51	36	30	41	34	25	25	16	12	11	15	8	24	22	20	31	35	20	22	37	27	26	25	32	30	29	19	21	32	23	13	25.5
Indian Mills	Maximum	66	54	48	56	46	49	45	30	26	26	26	32	43	42	40	46	48	43	55	55	50	46	44	45	51	51	46	50	53	46	35	44.9
	Minimum	54	34	35	42	84	21	25	14	6	10	18	−1	19	22	18	28	38	28	20	38	24	24	23	32	32	28	20	26	41	26	9	25.4
Lakewood	Maximum	65	54	46	53	45	45	39	28	23	26	25	30	42	40	37	46	45	39	54	55	45	42	40	44	44	53	40	48	47	45	33	42.5
	Minimum	53	36	29	40	34	27	25	16	10	13	15	7	26	21	23	29	38	19	19	36	25	25	26	34	32	32	21	17	33	24	13	25.7
Moorestown	Maximum	67	49	45	54	46	46	32	27	22	28	24	31	42	41	40	46	44	40	56	42	47	39	42	44	42	51	30	46	52	37	33	41.5
	Minimum	45	37	31	38	33	28	22	16	15	13	10	13	24	27	21	32	30	24	22	33	28	27	26	33	31	27	21	21	34	23	16	25.8
Pemberton	Maximum	66	50	48	55	47	47	38	28	23	25	25	31	41	41	38	45	45	42	56	55	48	40	43	45	48	52	41	50	52	45	33	43.3
	Minimum	50	36	28	39	33	26	26	18	13	13	16	8	25	23	20	34	37	21	22	36	26	27	26	34	30	29	21	20	34	26	15	26.2
Pleasantville§§	Maximum	63	51	55	58	48	49	35	29	29	28	27	32	44	42	41	49	57	48	54	45	50	44	45	47	51	51	33	48	54	46	49	45.2
	Minimum	55	31	27	32	32	25	26	15	6	12	14	3	20	23	15	19	38	42	16	39	21	21	24	26	30	27	20	17	30	28	9	24.0
Runyon	Maximum	67	54	50	54	44	46	38	28	24	26	23	26	44	42	40	43	42	43	54	54	48	44	38	37	38	51	41	44	44	36	40	42.0
	Minimum	53	28	20	38	30	21	22	6	4	8	10	−3	23	15	16	32	34	7	13	36	19	22	22	26	28	23	18	11	27	18	3	20.2
Trenton	Maximum	67	49	46	53	45	46	32	25	23	24	23	31	42	40	39	46	46	40	55	42	46	39	37	41	39	49	30	44	49	36	33	40.5
	Minimum	45	37	43	36	33	30	23	16	13	14	11	12	27	24	23	32	31	26	26	33	30	31	26	31	30	25	19	23	32	20	16	26.1
Tuckerton	Maximum	60	57	55	55	48	45	42	34	30	31	37	22	41	46	45	47	50	46	52	50	55	50	51	48	48	49	35	48	50	49	40	45.6
	Minimum	41	40	39	42	33	31	27	12	11	13	14	10	14	30	34	28	33	36	42	37	41	36	38	36	35	21	20	30	43	20	25	29.4
Philadelphia, Pa.	Maximum	67	52	47	56	47	47	36	29	24	26	26	33	44	43	42	51	49	41	54	43	46	42	41	44	43	48	32	45	53	37	33	42.6
	Minimum	46	41	38	39	35	33	25	21	18	17	16	18	29	28	28	35	34	29	29	34	33	35	29	33	32	26	21	26	35	22	19	29.2
The Sea Coast.																																	
Atlantic City	Maximum	60	51	53	57	48	47	36	30	29	28	27	32	43	41	40	48	47	40	54	45	49	43	45	48	49	52	33	46	54	38	39	43.6
	Minimum	44	39	37	38	32	32	26	20	18	19	12	12	31	25	25	40	31	27	40	36	36	34	29	34	34	29	22	30	38	22	17	29.2
Long Branch	Maximum	66	48	46	52	44	41	32	23	21	24	22	28	42	40	36	44	42	37	52	44	42	39	40	41	53	53	27	44	47	35	30	39.5
	Minimum	42	34	32	35	29	26	21	14	11	13	11	11	27	19	21	32	29	23	24	29	27	27	28	33	32	24	18	20	33	19	14	24.5
Sandy Hook	Maximum	63	48	48	51	44	43	34	24	24	26	24	30	41	40	35	43	41	38	51	44	43	43	40	41	38	50	28	39	45	33	31	39.5
	Minimum	45	40	38	38	36	34	24	16	15	18	14	14	29	25	23	34	32	29	30	34	33	33	28	34	34	27	19	24	33	20	18	28.1

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record. §§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Daily Evaporation (thousandths of an inch) and Wind Movement (miles)

Canoe Brook**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pleasantville**	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Runyon	Evaporation	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	Wind movement	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Note: Evaporation determined by measuring amount returned to pan to maintain standard level, less precipitation. * Measurement included in next following record. ** Observations taken in morning, and entered on preceding day. *** Pan overflowed. † 1.130

1.05
NJ

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

24 NEW JERSEY SECTION,

H. O. GEREN.

TRENTON, N. J.

VOL. XXXIX. ANNUAL SUMMARY, 1934. No. 13.

GENERAL SUMMARY.

The most notable feature of the weather during 1934 was the extreme cold that prevailed during February. The State average for the month, 18.8 degrees, was the lowest ever recorded for any month, the record extending back to 1885, a period of fifty years. The cold really started during the last three days of January and continued until about the 12th of March, with the lowest readings occurring on February 9th, and other minor low points on the 28th and on March 1st and 12th.

The next most pronounced feature was the very wet weather of September. The State average of 9.00 inches was the greatest on record for that month, exceeding the previous record of 8.36 inches, made in September 1889, by over half an inch.

Relatively mild and dry weather prevailed during the first month of the year with very little snowfall. This was succeeded by the cold weather of February and March mentioned above, and with heavy snowfall, in two storms, one on the 20th and the other on the 26th of February. In each storm the amounts of snow varied between six and twelve inches. The average total for the month for the State was the second greatest on record for February, it being 22.7 inches as against 31.3 inches in February of 1899. The extreme cold moderated somewhat during March, but rain or snow occurred at frequent intervals, the amounts generally being light to moderate so that the total for the month was still under normal. Conditions became more stable during April with about normal temperature and rainfall, but with the crop growing season estimated to be about two weeks late at the close of the month, due generally to the wet condition of the soil. Favorable weather then prevailed during May with only a few reports of killing frosts. Crop prospects became brighter, except for fruits, especially peaches, these having been almost totally destroyed by the winter killing of February. Other crops suffered winter killing but to a lesser extent. June experienced normal rainfall but it was concentrated on a few days and therefore lacked maximum benefits of a more evenly distributed rainfall, especially since it was the second warmest June on record. Moisture was deficient during July and the ground became quite dry. This relatively dry condition continued through August but was offset somewhat by the cool weather that prevailed, the month being the fifth coolest August on record. Then came the excessive wetness of September noted above. By the end of the month the ground was so wet that Fall work was seriously interfered with, except in those places having porous soils. October was dry and Fall work made good progress. About three-fourths of the month's rainfall came on one day, the 6th. A few killing frosts occurred on the 2d and 12th, and the first snow of the season appeared on the 28th but was inconsequential. Both November and December had less than normal precipitation, very little of which was snow, with November quite warm and December below normal in temperature.

The year, as a whole, was fairly free from destructive local storms.

COMPARATIVE ANNUAL DATA FOR THE STATE

Year	Temperature: Mean	Temperature: Highest	Temperature: Lowest	Average precipitation	Average snowfall
1885	50.4	100	−2	37.87	......
1886	50.8	98	−10	46.54	......
1887	51.3	102	−6	47.66	......
1888	50.2	99	−12	52.20	......
1889	52.8	95	−3	**63.33**	......
1890	53.1	101	0	49.34	......
1891	53.2	102	1	47.98	......
1892	51.5	105	−6	42.04	......
1893	50.7	103	−21	47.90	......
1894	53.0	106	−11	47.37	......
1895	51.5	**109**	−12	37.29	25.7
1896	52.1	105	−15	42.51	39.5
1897	52.0	102	−6	51.72	25.8
1898	53.1	107	−15	52.35	34.3
1899	52.1	103	−21	45.84	44.3
1900	53.8	104	−9	42.71	23.3
1901	51.3	107	−8	51.80	14.1
1902	51.9	100	−11	59.44	40.1
1903	51.7	100	−16	56.25	22.3
1904	**49.2**	100	**−34**	43.78	48.5
1905	51.2	102	−18	42.06	32.9
1906	52.7	98	−15	46.38	23.4
1907	50.3	96	−22	51.65	54.1
1908	52.6	106	−17	42.58	35.3
1909	51.9	100	−15	40.86	29.9
1910	51.8	99	−15	39.73	33.3
1911	52.6	104	−12	50.36	30.0
1912	51.3	100	−32	46.61	35.1
1913	54.0	100	−11	46.99	5.2
1914	51.2	99	−12	39.23	41.1
1915	52.4	98	−3	47.37	39.4
1916	51.0	100	−18	38.17	49.6
1917	49.5	104	−21	40.80	40.4
1918	51.6	108	−16	37.65	25.3
1919	52.6	103	−12	52.10	10.9
1920	51.2	98	−17	51.87	33.4
1921	54.2	100	−5	38.16	23.0
1922	52.6	98	−11	41.57	30.8
1923	51.9	106	−14	40.38	39.8
1924	50.6	102	−6	44.17	24.3
1925	52.2	103	−20	42.15	26.8
1926	50.0	105	−11	44.41	32.2
1927	52.0	99	−12	49.68	13.7
1928	52.0	99	−15	46.22	21.5
1929	52.3	102	−9	42.96	16.0
1930	52.7	105	−14	**35.28**	15.6
1931	**54.4**	102	−9	37.07	8.6
1932	53.4	100	−6	46.80	16.3
1933	52.9	105	−18	49.80	21.5
1934	51.6	103	−26	45.43	32.7
Period	51.9	109	−34	45.49	29.0

MONTHLY STATE DATA FOR 1934

Month	Temperature: Mean	Temperature: Departure from normal	Temperature: Highest	Temperature: Lowest	Precipitation: Average	Precipitation: Departure from normal	Precipitation: Greatest	Precipitation: Least	Precipitation: Snow	Precipitation: Greatest.
January	33.6	+2.7	64	−1	2.59	−0.98	4.07	0.92	0.2	2.5
February	18.6	−12.1	54	−26	2.77	−0.84	4.83	0.94	22.7	32.7
March	36.5	−2.6	77	−7	3.31	−0.47	4.81	1.64	9.6	18.6
April	49.4	−0.3	85	21	3.89	+0.28	6.42	1.74	T.	T.
May	62.3	+1.9	98	28	4.63	+0.90	6.51	2.88	0.0	0
June	72.6	+3.8	103	38	3.68	−0.03	6.41	1.64	0.0	0
July	75.8	+2.1	100	43	3.65	−1.14	6.89	1.85	0.0	0
August	69.8	−2.0	100	33	3.61	−1.14	9.11	1.40	0.0	0
September	67.3	+1.4	91	35	9.00	+5.44	13.52	4.02	0.0	0
October	52.6	−2.1	82	21	2.49	−0.92	3.43	1.48	T.	0.1
November	47.3	+3.7	80	10	2.91	−0.27	5.00	1.30	0.1	2.4
December	33.2	−0.5	69	−3	2.90	−0.75	4.11	1.89	0.1	0.9
Year	51.6	−0.3	103	−26	45.43	+0.08	13.52	0.92	32.7	32.7

KILLING FROSTS

Stations	Last in spring	First in autumn
The Highlands and Kittatinny Valley		
Belvidere	Apr. 29*	Oct. 13
Charlotteburg	May 9*	do. 2*
Culvers Lake	Apr. 29	do. 12*
Dover	do. 30	do. 2
Layton	May 13	do. 10
Long Valley	do. 13	do. 2*
Newton	Apr. 26	do. 13*
Phillipsburg	do. 29*	do. 15*
Sussex	do. 29*	do. 14*
The Red Sandstone Plain		
Boonton	Apr. 30*	Oct. 14*
Canoe Brook	May 13*	do. 14*
Elizabeth	Apr. 28*	do. 30*
Flemington	do. 30	do. 14
Jersey City	Mar. 29*	Nov. 14*
Lambertville	Apr. 28	Oct. 13
Little Falls	do. 30	do. 14*
New Brunswick	do. 28*	do. 14
Paterson	do. 29*	do. 25
Plainfield	do. 30	do. 14
Ridgefield	do. 30	do. 13
The Southern Interior		
Belleplain	Mar. 13*	....
Bridgeton	Apr. 25*	Oct. 12*
Burlington	do. 28*	do. 30
Camden	Mar. 30	do. 21*
Freehold	Apr. 30*	do. 13
Hammonton	do. 27*	do. 12*
Hightstown	....	do. 13*
Indian Mills	Apr. 30	do. 14
Lakewood	do. 30	do. 30
Moorestown	do. 29	do. 20
Pemberton	do. 26*	do. 13
Pleasantville	May 13*	do. 13*
Runyon	do. 13*	do. 13*
Trenton	Apr. 5	Nov. 3
Tuckerton	do. 28*	Oct. 13*
The Sea Coast		
Atlantic City	Apr. 28	Nov. 3
Long Branch	do. 30	Oct. 14
Sandy Hook	Mar. 26*	Nov. 14

* No frost reported; temperature 32° or below.

W. B. O. Philadelphia 3-28-35-1050

Climatological Data for the Year 1934

STATION	Counties	Temperature (degrees Fahrenheit)							Precipitation (inches)								Sky			
		Elevation, feet	Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall (unmelted)	Number days with .01 or more	Number clear days	Number partly cloudy days	Number cloudy days	Prevailing direction of wind
The Highlands and Kittatinny Valley.																				
Belvidere	Warren	289	43	51.4	103	June 29	−15	Feb. 9	43	47.65	8.33	Sept.	1.83	Feb.	29.0	108	208	55	102	......
Charlotteburg	Passaic	719	42	50.2	99	do. 29	−21	do. 9	42	53.47	12.58	do.	2.01	do.	29.6	125	224	32	109	w.
Culvers Lake	Sussex	848	......	......	......	......	......	......	33	40.09	6.23	do.	0.94	do.	30.7	99	188	87	80	e.
Dover	Morris	600	50	49.1	97	June 29	−19	Feb. 9	50	54.60	12.16	do.	2.27	do.	28.7	124	87	170	108	......
Layton	Sussex	480	33	48.0	96	June 29†	−23	Feb. 28	83	40.36	6.47	Sept.	1.26	Feb.	24.5	111	137	51	177	sw.
Long Valley	Morris	520	4	48.8	96	do. 29	−18	do. 9	4	50.06	10.72	do.	2.11	Dec.	28.0	104	177	66	122	w.
Newton	Sussex	769	51	......	96	do. 29†	−20	do. 9	48	44.50	8.88	do.	1.70	Feb.	......	......	......	......	......	sw.
Phillipsburg	Warren	363	43	51.1	100	do. 29	−9	do. 28	51	47.84	11.29	do.	1.98	Oct.	27.9	117	177	91	97	......
Sussex	Sussex	442	36	......	98	July 26	−17	do. 9	39	49.74	12.03	do.	1.40	Aug	28.7	102	......	......	......	......
Means and extremes	......	......	......	49.8	103	June 29	−23	Feb. 28	...	47.59	12.58	Sept.	0.94	Feb.	28.4	111	172	79	114	sw.
The Red Sandstone Plain.																				
Boonton	Morris	400	26	49.2	96	June 29†	−20	Feb. 9	44	45.73	12.35	Sept.	1.19	Feb.	......	110	183	21	161	ne.
Canoe Brook	Essex	173	4	49.3	98	do. 29	−26	do. 9	4	50.52	9.58	do.	2.16	Nov.	......	117	182	84	99	nw.
Chatham	Morris	185	......	......	......	......	......	......	30	51.54	9.55	do.	2.53	do.	......	134	159	94	112	......
Elizabeth	Union	45	50	51.9	98	June 21	−15	Feb. 9	55	46.98	11.41	do.	1.68	Nov.	34.5	129	221	56	88	......
Flemington	Hunterdon	140	37	52.6	102	June 29	−16	Feb. 9†	48	46.26	7.38	Sept.	1.85	Feb.	26.5	120	209	71	85	w.
Jersey City	Hudson	10	36	52.8	100	do. 29	−14	do. 9	36	45.43	10.32	do.	1.74	Nov.	38.6	113	131	114	120	nw.
Lambertville	Hunterdon	430	47	50.9	97	do. 29	−18	do. 9	47	43.51	6.60	do.	2.13	July	39.4	124	197	60	108	sw.
Little Falls	Passaic	180	20	51.4	100	do. 29	−18	do. 9	31	57.35	13.42	do.	2.18	Feb.	26.5	129	188	71	106	nw.
New Brunswick	Middlesex	110	77	51.8	99	June 29	−16	Feb. 9	81	42.40	9.13	Sept.	1.89	Nov.	33.5	122	183	102	80	w.
New Milford	Bergen	40	......	......	......	......	......	......	16	49.21	11.17	do.	1.91	do.	......	112	......	......	......	......
Paterson	Passaic	80	64	51.4	96	June 29	−16	Feb. 9	64	49.82	10.48	do.	2.46	Feb.	29.3	113	182	85	98	w.
Plainfield	Union	120	43	51.4	101	do. 29	−17	do 9	46	44.83	10.97	do.	2.13	Nov.	38.5	113	121	126	118	sw.
Ridgefield	Bergen	80	17	51.0	97	June 29	−17	Feb. 9	17	48.65	10.00	Sept.	2.36	Feb.	35.2	113	142	110	113	nw.
Woodcliff Lake	Bergen	100	......	......	......	......	......	......	16	49.96	12.04	do.	2.15	Aug.	......	110	......	......	......	......
New York, N. Y.	......	314	64	52.2	97	June 29	−14	Feb. 9	64	44.96	10.19	Sept.	1.69	Nov.	38.8	122	116	112	137	n.
Means and extremes	......	......	......	51.2	102	June 29	−26	Feb. 9	......	47.98	13.42	Sept.	1.19	Feb.	33.6	118	175	83	107	nw.
The Southern Interior.																				
Belleplain	Cape May	30	39	......	99	June 29	−13	Feb. 9	40	42.37	6.59	Sept.	0.32	Jan.	......	......	......	......	......	......
Bridgeton	Cumberland	30	46	52.7	101	do. 29	−12	do. 8	51	50.97	9.11	Aug.	2.35	do.	38.1	103	237	39	89	sw.
Burlington	Burlington	12	22	54.2	101	do. 29	−14	do. 9	48	41.72	7.54	Sept.	2.40	July	31.5	97	196	73	96	sw.
Camden	Camden	20	3	53.3	101	do. 29	−11	do. 9	2	34.11	4.48	Aug.	1.48	Oct.	30.3	117	112	130	123	nw.
Freehold	Monmouth	194	3	52.0	100	do. 29	−20	do. 9	30	42.89	8.78	Sept.	1.76	do.	41.0	117	214	58	93	w.
Hammonton	Atlantic	110	2	......	99	June 29†	......	......	28	50.52	6.99	Sept.	1.97	Jan.	......	......	......	......	......	......
Indian Mills	Burlington	76	45	......	99	do. 29†	−25	Feb. 9	44	51.36	8.19	do.	2.46	Oct.	......	......	......	......	......	......
Lakewood	Ocean	54	30	52.0	98	do. 29	−16	do. 9	30	38.98	5.13	do.	1.55	Aug.	44.0	113	149	77	139	nw.
Moorestown	Burlington	62	71	52.1	99	do. 29	−13	do. 9	71	40.54	8.19	do.	1.96	Nov.	31.7	116	150	105	110	sw.
Northfield	Atlantic	25	......	......	......	......	......	......	27	45.33	8.90	do.	1.36	Jan.	32.8	106	......	......	......	......
Pemberton	Burlington	60	4	53.2	100	June 29	−17	Feb. 9	4	41.70	8.43	do.	1.92	Oct.	33.4	125	194	56	115	w.
Pleasantville	Atlantic	11	11	52.1	98	June 29	−11	Feb. 9	36	44.90	7.32	Sept.	1.83	Jan.	......	120	225	43	97	s.
Port Norris	Cumberland	10	2	......	......	......	......	......	2	41.53	5.64	July	1.48	do.	27.5	86	201	76	88	sw.
Runyon	Middlesex	18	10	50.7	99	June 29	−19	Feb. 9	11	48.70	10.90	Sept.	1.30	Nov.	. .	94	211	99	55	w.
Trenton	Mercer	190	62	52.2	100	do. 29	−14	do. 9	62	41.90	10.49	do.	1.97	do.	31.3	132	101	132	132	s.
Trenton No. 2	Mercer	105	......	......	......	......	......	......	6	46.85	11.92	do.	2.02	do.	39.2	121	......	......	......	......
Tuckerton	Ocean	23	36	53.7	95	June 29†	−12	Feb. 9	41	37.29	5.49	do.	1.10	Jan.	33.0	132	169	99	97	n.
Philadelphia, Pa.	......	114	63	55.1	102	June 29	−11	Feb. 9	63	38.36	6.27	Sept.	1.54	Oct.	28.3	124	112	113	140	sw.
Means and extremes	......	......	......	52.6	101	June 29	−25	Feb. 9	......	43.63	11.92	Sept.	0.92	Jan.	34.5	113	180	82	103	sw.
The Sea Coast.																				
Asbury Park	Monmouth	22	44	......	98	June 29	−12	Feb. 9	45	40.76	6.28	July	1.74	Oct.	......	......	......	......	......	......
Atlantic City	Atlantic	16	61	53.1	91	July 16	−9	do. 9	61	40.45	5.54	Sept.	1.46	Jan.	33.4	126	94	108	163	s.
Long Branch	Monmouth	25	26	50.9	99	June 29	−12	do. 9	26	42.31	6.66	do.	2.46	Oct.	43.6	129	126	102	137	nw.
Sandy Hook	Monmouth	22	36	51.8	96	do. 29	−11	do. 9	36	41.00	10.00	do.	1.77	Nov.	29.9	129	126	96	143	s.
Means and extremes	......	......	......	51.9	99	June 29	−12	Feb. 9	......	41.13	10.00	Sept.	1.46	Jan.	35.6	128	115	102	148	s.
For the State	......	......	......	51.6	103	June 29	−26	Feb. 9	......	45.43	13.52	Sept.	0.92	Jan.	32.7	117	169	85	111	sw.

† Also on other dates.

Monthly and Annual Precipitation for the Year 1934, with Departures from the Normal

STATIONS	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	3.21	−0.55	1.83	−1.73	4.55	+0.86	4.85	+1.09	4.34	+0.80	4.29	+0.29	4.59	+0.05	2.69	−1.88	8.33	+4.59	2.25	−1.57	3.73	+0.54	2.99	−0.92	47.65	+1.57
Charlotteburg	3.00	−0.62	2.01	−1.68	3.94	−0.05	4.88	+0.56	5.20	+1.32	5.28	+0.82	2.62	−1.96	3.12	−1.38	12.58	+8.43	2.48	−1.93	5.00	+1.38	3.36	−0.64	53.47	+4.25
Culvers Lake	2.90	−0.14	0.94	−2.02	2.88	−0.44	3.75	+0.22	3.77	−0.06	3.89	−0.55	5.30	+0.52	1.70	−2.95	6.23	+2.21	2.67	−0.94	3.49	+0.39	2.57	−0.77	40.09	−4.53
Dover	3.36	−0.64	2.27	−1.50	4.81	+0.79	3.61	−0.45	6.10	+2.47	3.95	−0.48	3.75	−1.46	4.24	−0.26	12.16	+8.08	2.71	−1.43	4.40	+0.85	3.24	−0.94	54.60	+5.03
Layton	2.52	−0.46	1.26	−1.73	2.28	−1.01	5.06	+1.57	3.95	+0.81	3.37	−1.16	5.03	+0.63	2.33	−1.76	6.47	+2.61	2.21	−1.54	3.99	+0.92	1.89	−1.48	40.36	−2.60
Long Valley	2.67	......	2.30	......	2.70	......	3.66	......	4.13	......	6.41	......	3.85	......	3.86	......	10.72	......	2.82	......	4.83	......	2.11	......	50.06	......
Newton	2.85	−0.53	1.70	−1.45	3.13	−0.26	4.28	+0.75	4.23	+0.62	3.72	−0.76	3.94	−0.89	2.19	−2.16	8.88	+5.12	2.27	−1.38	4.63	+1.56	*2.68	−0.73	44.50	−0.11
Phillipsburg	3.12	−0.26	2.46	−0.85	3.81	+0.47	2.99	−0.40	4.06	+0.75	3.80	+0.07	3.57	−0.91	4.52	+0.12	11.29	+7.80	1.98	−1.62	3.77	+0.94	2.47	−0.96	47.84	+5.15
Sussex	2.39	−0.58	2.08	−0.88	3.71	+0.56	5.14	+1.61	4.40	+0.97	1.86	−2.22	6.41	+2.59	1.40	−2.60	12.03	+8.46	2.73	−0.63	4.31	+1.49	3.28	+0.31	49.74	+9.08
The Red Sandstone Plain.																										
Boonton	2.80	−0.58	1.19	−2.11	1.64	−2.00	4.01	+0.11	4.76	+1.06	3.14	−0.82	2.95	−1.69	3.78	−0.91	12.35	+8.50	2.71	−1.20	3.22	+0.21	3.18	−0.52	45.73	+0.05
Canoe Brook	3.42	......	2.62	......	2.79	......	5.42	......	5.42	......	4.48	......	2.90	......	4.84	......	9.58	......	3.34	......	2.16	......	3.55	......	50.52	......
Chatham	3.66	−0.31	2.77	−1.10	3.46	−0.58	5.29	+1.07	5.06	+1.14	4.38	+0.42	2.68	−2.26	4.71	+0.06	9.55	−5.33	3.43	−0.68	2.53	−0.91	4.02	−0.15	51.54	+2.03
Elizabeth	3.60	−0.10	3.48	−0.38	3.00	−0.96	4.43	+0.59	4.95	+1.31	4.16	+0.56	2.61	−2.11	2.22	−2.11	11.41	+7.80	2.75	−1.20	1.68	−1.24	2.69	−1.23	46.98	+0.93
Flemington	3.59	+0.12	1.85	−1.47	3.70	+0.04	4.61	+0.99	4.40	+0.88	5.21	+1.60	2.68	−2.17	4.98	+0.46	7.38	+3.74	2.35	−1.16	2.93	−0.02	2.58	−1.08	46.26	+1.93
Jersey City	3.36	−0.34	2.89	−1.04	3.60	−0.42	3.82	+0.07	4.01	+0.56	3.52	−0.26	5.53	+1.18	1.75	−2.58	10.32	+6.92	2.41	−1.69	1.74	−1.26	2.48	−1.17	45.43	−0.03
Lambertville	3.08	−0.38	2.77	−0.61	2.68	−1.11	3.88	+0.08	4.60	+0.94	5.57	+1.81	2.13	−2.51	4.62	−0.18	6.60	+3.24	2.62	−0.93	2.36	−0.64	2.60	−1.10	43.51	−1.39
Little Falls	3.50	−0.17	2.18	−1.62	2.94	−0.83	6.42	+2.26	6.51	+2.57	5.45	+1.43	3.98	−0.74	3.03	−1.93	13.42	+9.74	2.99	−0.60	2.82	−0.58	4.11	+0.17	57.35	+9.70
New Brunswick	3.23	−0.17	2.78	−0.59	2.94	−0.62	3.70	+0.09	4.07	+0.41	3.92	+0.24	2.22	−3 01	3.05	−2.35	9.13	+5.77	3.30	−0.52	1.89	−0.95	2.17	−1.37	42.40	−3.07
New Milford	3.86	+0.78	2.93	−0.26	3.32	−0.03	4.88	+1.46	5.34	+1.83	3.71	+0.16	3.73	−1.39	2.73	−1.82	11.17	+7.09	2.62	−0.26	1.91	−1.30	3.01	+0.01	49.21	+6.27
Paterson	3.57	+0.02	2.46	−1.52	3.42	−0.53	3.76	−0.07	5.91	+2.14	4.06	+0.36	5.21	+0.91	2.82	−1.81	10.48	+6.87	2.51	−1.60	3.01	−0.11	2.61	−1.24	49.82	+3.42
Plainfield	3.07	−0.58	2.98	−0.77	4.04	+0.08	4.16	+0.37	3.63	−0.10	3.34	−0.53	2.17	−3.38	3.29	−1.81	10.97	+6.94	2.70	−1.38	2.13	−0.92	2.35	−1.52	44.83	−3.60
Ridgefield	3.61	−0.05	2.36	−1.54	4.65	+0.58	3.84	+0.39	5.57	+2.10	3.22	−0.92	4 04	−0.78	2.84	−2.07	10.00	+6.86	3.36	−0.87	2.44	−0.40	2.72	−1.09	48.65	+2.21
Somerville	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2.45	−0.52	2.39	−1.32	......	......
Woodcliff Lake	4.07	+0.92	3.02	−0.30	3.14	+0.07	4.90	+1.46	5.29	+1.95	4.04	+0.68	3.36	−1.21	2.15	−2.07	12.04	+8.18	2.47	−0.38	2.37	−0.66	3.11	+0.12	49.96	+8.76
New York, N. Y	3.35	−0.31	2.80	−1.02	4.40	+0.76	3.16	−0.07	4.05	+0 81	3.21	−0.12	5.67	+1.43	1.74	−2.59	10.19	+6.80	2.27	−1.26	1.69	−1.27	2.43	−1.19	44.96	+1.97
The Southern Interior.																										
Belleplain	0.92	−2.62	*3.94	+0.61	*3.98	+0.22	*2.78	−1.92	5.20	+1.68	2.04	−1.40	*3.42	−0.89	5.79	+1.19	*6.59	+3.21	*2.30	−0.60	2.95	+0.41	2.46	−1.54	42.37	−1.65
Bridgeton	2.35	−1.10	3.81	+0.59	3.48	−0.36	3.17	−0.43	4.87	+1.60	2.64	−1.28	6.88	+2.43	9.11	+4.44	5.70	+2.39	2.82	−0.28	3.37	+0.77	2.77	−0.93	50.97	+7.84
Burlington	3.40	−0.17	2.56	−0.76	2.99	−0.72	3.04	−0.74	2.88	−0.63	3.80	+0.11	2.40	−2.54	3.64	−2.14	7.54	+3.98	3.05	−0.44	3.36	+0.38	3.06	−0.89	41.72	−4.56
Camden	2.86	......	2.06	......	2.40	......	3.09	......	3.35	......	3.67	......	1.88	......	4.88	......	4.02	......	1.48	......	2.59	......	2.23	......	34.11	......
Freehold	2.96	−1.00	4.62	+0.48	3.19	−1.46	3.51	−0.13	4.89	+1.11	2.44	−1.17	2.66	−2.60	2.62	−1.97	8.78	+4.49	1.76	−1.95	2.43	−1.59	3.03	−0.69	42.89	−6.48
Hammonton	*1.97	−1.77	*2.83	−0.41	*3.68	−0.24	*4.46	−0.68	4.76	+1.15	5.21	+1.45	4.89	+0.35	5.81	+0.93	6.99	+2.78	2.92	−0.93	3.43	+0.39	3.57	−0.41	50.52	+2.61
Hightstown	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2.25	−2.77	11.36	+8.15	2.66	−1.04	2.07	−0.84	2.84	−0.70	......	......
Indian Mills	*2.60	−1.37	3.22	−0.45	3.83	−0.25	4.50	+0.70	4.12	+0.78	4.89	+0.96	3.06	−1.69	7.66	+2.13	8.19	+4.70	2.46	−1.23	3.56	+0.56	3.27	−0.84	51.36	+4.00
Lakewood	2.99	−1.01	3.71	−0.18	3.31	−0.86	3.98	+0.03	4.12	+0.34	3.42	−0.59	1.85	−3.15	1.55	−3.64	5.13	+2.09	2.37	−1.43	3.36	+0.27	3.19	−1.00	38.98	−9.13
Moorestown	2.62	−0.72	2.30	−0.95	2.04	−1.64	4.07	+0.42	4.30	+0.78	3.54	−0.24	2.35	−2.35	3.76	−1.61	8.19	+4.66	2.10	−1.38	1.96	−0.95	3.31	−0.46	40.54	−4.44
Northfield	1.36	−1.78	3.94	+1.10	4.51	+1.07	2.75	−0.57	5.56	+2.32	1.64	−1.65	2.93	−1.21	6.08	+1.56	8.90	+6.05	1.98	−1.22	2.68	−0.03	3.00	−0.77	45.33	+4.87
Pemberton	2.57	......	3.32	......	2.30	......	3.32	......	3.82	......	4.49	......	2.47	......	2.71	......	8.43	......	1.92	......	3.11	......	3.24	......	41.70	......
Pleasantville	1.83	−0.37	3.17	+0.27	3.72	+0.31	3.86	+0.44	5.39	+2.21	2.23	−1.27	3.31	−0.75	6.03	+1.37	7.32	+4.35	2.09	−1.24	2 80	−0.02	3.15	−0.78	44.90	+4.52
Port Norris	1.48	......	3.97	......	3.71	......	3.29	......	5.36	......	2.14	......	5.64	......	2.17	......	4.59	......	2.33	......	3.43	......	3.42	......	41.53	......
Runyon	3.44	−0.02	3.01	−0.48	3.39	+0.29	3.57	−0.39	4.47	+0.57	4.13	+0.60	6.89	+1.51	2.05	−3.27	10.90	+7.30	2.91	−0.91	1.30	−1.88	2.64	−0.70	48.70	+2.62
Trenton	3.37	+0.06	2.21	−1.06	2.92	−0.48	2.73	−0.21	4.79	+1.71	3.41	+0.32	2.90	−1.04	2.59	−2.16	10.49	+7.09	2.15	−0.63	1.97	−0.76	2.37	−0.98	41.90	+1.86
Trenton No. 2	3.33	......	2.92	......	2.35	......	3.88	......	4.95	......	4.27	......	2.57	......	2.92	......	11.92	......	2.34	......	2.02	......	3.38	......	46.85	......
Tuckerton	1.10	−2.57	2.62	−0.87	3.32	−0.81	1.74	−2.03	4.39	+0.95	2.48	−1.25	2.83	−1.15	5.36	+0.06	5.49	+2.23	1.48	−2.14	3.22	+0.22	3.26	−1.07	37.29	−8.43
Philadelphia, Pa	2.91	−0.39	2.75	−0.57	2.92	−0.47	3.11	+0.06	3.92	+0.66	3.22	−0.02	2.18	−1.97	4.29	−0.33	6.27	+3.13	1.54	−1.27	2.64	−0.06	2.61	−0.82	38.36	−2.05
The Sea Coast.																										
Asbury Park	2.87	−0.61	3.54	+0.13	3.68	+0.05	*2.84	−0.69	4.57	+1.31	1.81	−1.90	6.28	+2.01	2.63	−2.18	*5.53	+2.89	*1.74	−1.56	*2.50	−0.26	*2.77	−1.07	40.76	−1.88
Atlantic City	1.46	−2.03	4.83	+1.47	4.68	+1.08	2.30	−0.69	4.88	+1.83	2.48	−0.56	2.09	−1.84	5.00	+0.51	5.54	+2.89	1.57	−1.63	2.83	+0.01	2.79	−1.15	40.45	−0.11
Long Branch	2.81	−1.33	4.01	−0.12	3.14	−1.03	3.42	−0.85	3.98	+0.13	3.22	−0.64	3.49	−2.36	2.94	−2.54	6.66	+3.47	2.46	−1.93	3.20	−0.36	2.98	−1.17	42.31	−8.73
Sandy Hook	2.84	−1.12	2.18	−1.57	3.05	−0.99	2.92	−0.70	3.56	−0.16	3.40	−0.38	4.74	−0.38	2.09	−2.89	10.00	+6.57	2.15	−1.63	1.77	−1.48	2.30	−1.74	41.00	−6.47

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* Interpolated from surrounding stations.

Monthly and Annual Mean Temperatures for the Year 1934, with Departures from the Normal

Stations.	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
The Highlands and Kittatinny Valley.																										
Belvidere	31.4	+4.0	18.2	−9.7	[a]35.8	−2.8	[a]50.6	+1.0	63.8	+3.4	73.3	+4.4	[k]77.8	+4.6	[b]69.4	−1.4	68.0	+3.0	52.4	−2.7	[d]45.4	+4.0	31.0	+0.2	51.4	+0.7
Charlotteburg	30.6	+3.7	17.8	−8.6	34.6	−1.7	48.3	+1.7	61.4	+4.2	71.6	+6.6	73.9	+4.0	68.4	+0.9	65.6	+3.5	51.5	+0.2	46.5	+6.1	32.1	+0.2	50.2	+1.9
Dover	30.5	+3.8	[b]15.6	−11.3	34.4	−1.5	47.6	+0.2	60.9	+2.5	[a]70.8	+4.0	73.8	+2.4	67.0	−2.1	[a]64.0	+1.6	[a]49.6	−1.8	45.1	+4.7	30.2	+0.1	49.1	+0.2
Layton	29.4	+4.4	14.6	−10.5	33.4	−2.7	46.5	−0.6	59.8	+2.3	69.6	+3.9	72.6	+1.7	65.7	−2.5	63.8	+1.2	48.3	−2.8	43.6	+4.3	28.8	+0.7	48.0	0.0
Long Valley	30.2	......	15.3	......	34.4	......	47.4	......	60.8	......	[b]69.6	......	72.6	......	66.7	......	[a]64.6	......	50.1	......	43.8	......	30.7	......	48.8	......
Newton	31.0	+5.1	17.6	−9.4	34.9	−1.1	48.8	+0.8	61.6	+2.2	70.4	+2.4	74.2	+1.7	67.3	−3.0	65.5	+1.7	51.0	−1.8	45.0	+4.2	.....	.....	.....	......
Phillipsburg	31.8	+3.4	18.5	−10.3	35.8	−2.8	49.8	+0.2	63.3	+2.3	73.1	+3.8	75.7	+1.8	69.4	−2.3	67.0	+1.7	51.8	−1.9	45.4	+3.6	31.8	+0.3	51.0	0.0
Sussex	29.8	+3.0	17.6	−8.9	36.1	−0.8	49.8	+1.4	63.6	+4.3	74.4	+7.6	.....	.....	.....	.....	.....	.....	51.6	−1.3	[d]46.9	+5.7	30.4	+0.5	.....	......
The Red Sandstone Plain.																										
Boonton	30.9	+3.8	16.4	−11.3	34.0	−1.4	47.8	−0.3	60.6	+2.3	70.1	+2.8	73.6	+1.7	67.6	−2.5	65.3	+1.8	50.8	−1.2	43.6	+2.4	29.2	−0.1	49.2	−0.2
Canoe Brook	31.4	......	15.7	......	34.8	......	47.6	......	60.6	......	69.8	......	73.0	......	67.4	......	65.2	......	50.6	......	45.0	......	31.0	......	49.3	......
Elizabeth	33.7	+3.3	18.8	−12.2	38.2	−1.2	50.3	−0.6	62.6	+0.9	[a]73.7	+3.3	75.8	+0.6	71.4	−1.8	67.6	+0.7	51.0	−4.3	[b]46.4	+2.6	33.8	+0.2	51.9	−0.7
Flemington	34.2	+4.3	19.8	−10.1	37.2	−3.4	51.4	+1.2	63.4	+2.4	73.6	+4.1	77.0	+2.5	71.0	−1.3	68.1	+1.6	54.2	−1.4	47.8	+4.5	33.4	+0.9	52.6	+0.4
Jersey City	34.4	+2.3	19.9	−11.6	37.6	+2.4	50.0	−0.2	63.8	+2.5	74.0	+3.1	77.7	+1.9	71.3	−2.3	68.7	+1.2	54.1	−2.1	48.6	+4.1	33.5	−1.0	52.8	0.0
Lambertville	33.1	+2.9	18.0	−12.6	35.8	−3.9	49.1	−1.1	62.2	+1.2	71.5	+2.0	75.6	+1.6	69.2	−2.8	66.4	+0.6	52.2	−2.0	46.7	+3.6	31 2	−2.3	50.9	−1.1
Little Falls	33.0	+4.5	18.2	−11.1	36.8	−0.5	50.0	+1.7	62.5	+2.7	72.4	+3.7	75.8	+2.0	69.9	−1.3	67.2	−0.1	52.2	−1.0	46.9	+4.9	32.1	−0.3	51.4	+0.4
New Brunswick	33.6	+3.3	17.7	−13.3	36.8	−2.4	49.6	−0.1	62.8	+2.4	72.7	+3.5	76.8	+2.8	70.2	−1.8	67.5	+1.7	52.9	−1.8	47.6	+4.0	32.8	−0.6	51.8	−0.2
Paterson	33.8	+3.9	19.7	−10.9	37.4	−2.0	50.2	−0.5	63.8	+2.3	71.5	+1.5	[a]74.6	+0.1	[a]68.2	−4.0	66.4	0.0	[a]51.9	−3.3	46.6	+2.9	32.3	−1.1	51.4	−0.9
Plainfield	32.2	+2.4	17.3	−12.0	36.0	−3.1	49.0	−0.4	62.3	+2.5	72.5	+3.9	76.4	+2.8	70.0	−1.4	67.6	+2 1	52.8	−1.0	47.6	+5.0	32.7	−0.1	51.4	+0.1
Ridgefield	33.0	+4.5	17.1	−11.7	35.6	−0.9	48.6	+0.7	62.0	+2.9	72.6	+5.0	76.0	+3.1	69.7	−1.0	67.6	+2.7	51.6	−1.4	47.0	+5.2	31.6	+0.3	51.0	+0.8
Somerville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[f]46.2	+3.5	32.4	−0.1	.....	......
New York, N. Y.	34.4	+3.5	19.8	−11.5	37.2	−0.5	49.5	+0.1	62.6	+2.0	72.4	+3.6	76.2	+2.4	70.4	−2.7	68.2	+1.4	53.8	−2.5	48.2	+4.0	33.4	−1.6	52.2	−0.2
The Southern Interior.																										
Belleplain	[d]37.2	+4.2	[f]21.3	−11.2	.....	.....	[h]50.6	+0.1	[a]62.8	+2.2	73.0	+4.1	[h]76.0	+2.6	.....	.....	.....	.....	.....	.....	[a]51.4	+7.0	36.2	+1.1	.....	......
Bridgeton	35.2	+1.5	19.0	−15.1	37.8	−4.8	50.6	−1.7	63.0	−0.5	74.9	+2.8	76.6	+0.1	71.1	−3.5	68.8	+0.4	53.4	−3.8	48.6	+2.9	33.7	−2.4	52.7	−2.0
Burlington	35.5	+2.5	21.8	−10.5	40.0	−1.3	52.2	+0.2	65.6	+2.7	75.6	+3.9	76.7	−0.1	72.2	−2.2	69.4	+1.7	55.3	−1.6	49.6	+4.9	36.2	+1.3	54.2	+0.1
Camden	35.1	......	18.9	......	37.6	......	51.6	......	65.1	......	75.8	......	78.5	......	72.3	......	68.8	......	53.3	......	48.4	......	34.0	......	53.3	......
Freehold	34.4	......	17.8	......	36.4	......	49.5	......	62.8	......	73.8	......	77.0	......	70.8	......	67.8	......	52.9	......	47.5	......	33.2	......	52.0	......
Hammonton	.....	.....	.....	.....	.....	.....	.....	.....	63.4	......	74.6	.....	76.8	......	71.9	......	68.3	......	54.3	......	49.2	......	33.8	.....	.....	......
Hightstown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70.0	−1.9	67.4	+0.7	52.4	−2.5	48.1	+4.6	33.6	+0.7	.....	......
Indian Mills	.....	.....	19.8	−12.7	38.2	−2.9	50.5	0.0	63.7	+2.0	73.6	+3.7	76.2	+1.7	70.4	−2.0	68.4	+2.0	53.8	−1.4	48.4	+4.9	35.2	+1.2	.....	......
Lakewood	35.4	+3.9	19.0	−12.0	37.6	−2.7	49.0	−0.5	62.5	+2.5	72.8	+4.6	76.2	+3.2	70.2	−0.7	67.2	+2.2	52.6	−1.6	47.6	+4.4	34.1	+0.2	52.0	+0.3
Moorestown	34.5	+3.6	18.4	−13.4	36.6	−3.2	50.4	−0.1	62.6	+1.4	73.6	+3.4	76.6	+1.9	70.2	−2.3	67.8	+1.5	52.8	−2.1	47.8	+4.9	33.6	−0.1	52.1	−0.4
Pemberton	35.6	......	18.1	......	38.4	......	51.2	......	64.6	......	74.4	......	77.4	......	71.6	......	68.9	.....	54.6	......	49.4	......	34.8	......	53.2	......
Pleasantville	36.6	......	21.4	......	36.6	......	49.3	......	61.6	......	72.0	......	75.1	......	[a]70.2	......	67.8	......	52.8	......	47.3	......	34.6	......	52.1	......
Runyon	32.8	......	15.4	......	36.2	......	48.8	......	63.7	......	72.1	......	75.4	......	69.3	......	66.1	......	52.2	......	45.4	......	31.1	......	50.7	......
Trenton	34.2	+3.7	18.5	−12.2	37.0	−2.1	50.2	+0.4	63.2	+2.1	73.5	+4.0	76.6	+2.1	70.5	−2.5	68.2	+1.3	53.2	−2.4	48.1	+3.7	33.3	−1.1	52.2	−0.3
Tuckerton	39.8	+6.9	24.5	−7.9	38.8	−2.3	47.2	−2.4	[a]58.7	−1.1	72.4	+3.6	77.9	+3.9	71.2	−1.2	67.5	+0.8	57.6	+1.7	51.8	+7.1	37.5	+2.3	53.7	+1.0
Philadelphia, Pa.	37.8	+5.2	22.2	−11.7	39.9	−0.9	53.2	+1.1	66.1	+3.2	76.2	+4.8	79.3	+3.1	73.2	−1.6	70.8	+2.8	56.0	−1.8	50.6	+4.9	35.9	−0.4	55.1	+0.7
The Sea Coast.																										
Asbury Park	36.2	+3.7	20.3	−11.7	[a]36.6	−2.9	.....	.....	59.6	+1.1	71.8	+4.3	75.1	+2.7	70.4	−1.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	......
Atlantic City	38.8	+5.8	23.6	−10.0	37.0	−1.6	48.9	+1.1	59.6	+1.5	70.7	+4.1	75.7	+3.6	71.8	−0.7	69.6	+2.8	55.6	−1.3	49.6	+4.0	36.4	0.0	53.1	+0.8
Long Branch	33.9	+2.4	17.8	−13.4	36.2	−3.2	47.4	−0.8	60.0	+2.0	71.6	+4.5	75.6	+3.5	69.6	−1.2	67.2	+1.3	51.9	−3.5	47.4	+3.2	32.0	−2.2	50.9	−0.6
Sandy Hook	34.2	+2.9	19.9	−12.2	35.7	−3.6	47.7	−0.6	60.2	+1.8	71.2	+3.4	75.7	+2.2	70.9	−1.6	69.0	+1.5	54.7	−2.2	48.4	+2.6	33.8	−1.4	51.8	−0.6

Reference letters, as a, b, c., in table indicate number of days missing; for example, b represents 2 days.

THE WEATHER BY MONTHS.

JANUARY: Temperature above normal except last three days; precipitation about three-fourths of normal, very little of which was in the form of snow. FEBRUARY: The coldest month on record with only two or three days above normal; precipitation average less than normal and nearly all snow. However, the snowfall, unmelted, was the third heaviest on record. MARCH: Cold, with frequent rain and snow, but total precipitation less than normal in amont. Early Spring work at a standstill. The temperature average about normal, but with the third de- Some floods due to ice jams first few days of month. APRIL: cade colder than the first, contrary to the usual trend. Frequent rains but sunshine was abundant, nevertheless. Crop season about two weeks late. MAY: Generally favorable weather with both temperature and rainfall above the normal. A pronounced dust storm crossed the State on the 11th. JUNE: Second warmest June on record, with the highest temperatures around the 100-degree mark on the 29th, these proving to be generally the highest for the year. Most of the rain was concentrated on a few days. JULY: A little warm and somewhat dry. Moisture well distributed throughout the month, but varied widely in local amounts. AUGUST: Cool and moderately dry. A generally favorable month marred by heavy flood loss at Bridgeton resulting from a seven-inch downpour. SEPTEMBER: Very wet, the State average being the greatest on record for September and about 250% of normal; the temperature averaged nearly normal. OCTOBER: Cool and dry. Most stations experienced their first snow of the season and first freezing temperatures. NOVEMBER: Generally warm and dry. DECEMBER: Mostly normal conditions prevailed, except that snowfall was about the least on record for December.

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